Subscription Information

Subscriptions

This publication is available on an annual subscription basis from the Superintendent of Documents, U.S. Government Printing Office (GPO). Prices and ordering information for this and other Energy Information Administration (EIA) publications may be obtained from the GPO or the EIA's National Energy Information Center. Addresses and telephone numbers appear below. An order form is enclosed for your convenience.

National Energy Information Center, El-20 Energy Information Administration Room 1F-048, Forrestal Building Washington, D.C. 20585 (202) 252-8800

Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402 (202) 783-3238

Information

Questions on energy statistics may be directed to the National Energy Information Center at the address and phone number shown above.

Released for printing: January 24, 1984

SPECIAL NOTICE-

The Energy Information Administration (EIA) is undertaking a program to make the dates of its periodicals consistent and explicit. Beginning in January 1984, issues of all EIA periodicals will be dated according to the bulk of the data in them, NOT (as in the past) the date of publication. The data date will be displayed prominently on covers, title pages, and spines. The publication date will be less prominently displayed.

Some monthly periodicals will have to have more than one December issue (designated December 1983 [1], December 1983 [2], etc.). Once the bulk of the data in these periodicals is vintage January 1984, the periodical will be dated January 1984. In the case of the Monthly Energy Review, for example, there will be three "December 1983" issues; the January 1984 issue will be published in April. Other monthly periodicals will follow similar procedures.

Petroleum Supply Monthly



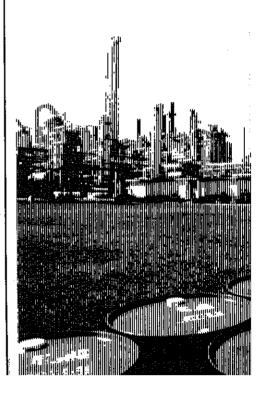
December 1983 [2]

November 1983 data published January 1984

This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the Department of Energy. The information contained herein should not be construed as advocating or necessarily reflecting any policy position of the Department of Energy or any other organization.

Energy Information Administration

Washington, D.C. 20585



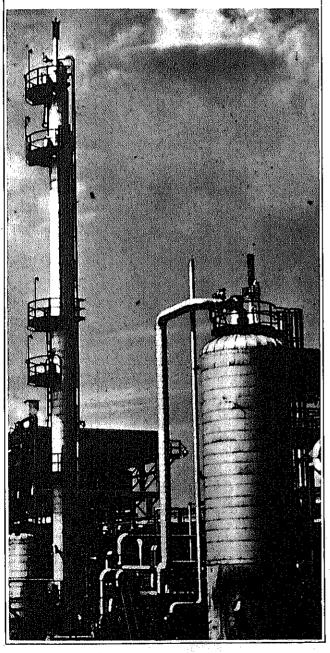




Contents

This Month in the PSM

This issue of the Petroleum Supply Monthly focuses on petroleum developments over the past year. "U.S. Petroleum Developments: 1983," beginning on page ix, summarizes changes in consumption, refinery operations, petroleum stocks, Imports, exports, and prices. The article also includes information on crude oil production and drilling activity. A special "Update on Refinery Closings" appears on page xi, and a supplemental summary of developments related to the Strategic Petroleum Reserve appears on page xii. A third insert illustrating the downward trend in petroleum imports since 1979 is found on page xiii.



Petroleum Focus Petroleum Supply Summary. U.S. Petroleum Developments: 1983 Summary Statistics—through December 1983 Crude Oil and Petroleum Products Overview Crude Oil Supply and Disposition Crude Oil and Petroleum Products imports Finished Motor Gasoline Supply and Disposition Distiliate Fuel Oil Supply and Disposition Residual Fuel Oil Supply and Disposition Liquefied Petroleum Gases Supply and Disposition Other Petroleum Products Supply and Disposition Sources Detailed Statistics—November 1983 National Statistics 1. U.S. Petroleum Balance 2. Supply and Disposition of Crude Oil and Petroleum Products 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products 4. Dally Average Supply and Disposition of Crude Oil and Petroleum Products 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products. Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products PAD District II. 8. PAD District III. 9. PAD District III. 9. PAD District IV. 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products by PAD Districts	age
U.S. Petroleum Developments: 1983 Summary Statistics—through December 1983 Crude Oil and Petroleum Products Overview Crude Oil Supply and Disposition Crude Oil and Petroleum Products Imports Finished Motor Gasoline Supply and Disposition Distillate Fuel Oil Supply and Disposition Residual Fuel Oil Supply and Disposition Liquefied Petroleum Gases Supply and Disposition Cother Petroleum Products Supply and Disposition Sources Detailed Statistics 1. U.S. Petroleum Balance 2. Supply and Disposition of Crude Oil and Petroleum Products 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products 4. Dally Average Supply and Disposition of Crude Oil and Petroleum Products 5. Year-to-Date Dally Average Supply and Disposition of Crude Oil and Petroleum Products 5. Year-to-Date Dally Average Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products PAD District II 8. PAD District III 9. PAD District III 9. PAD District IV 10. PAD District IV 10. PAD District IV Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983 Natural Gas Processing 12. Plant Production of Petroleum Products	
Crude Oil and Petroleum Products Overview Crude Oil Supply and Disposition Crude Oil and Petroleum Products imports Finished Motor Gasoline Supply and Disposition Distiliate Fuel Oil Supply and Disposition Residual Fuel Oil Supply and Disposition Liquefied Petroleum Gases Supply and Disposition Other Petroleum Products Supply and Disposition Sources Detailed Statistics—November 1983 National Statistics 1. U.S. Petroleum Balance 2. Supply and Disposition of Crude Oil and Petroleum Products 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products 4. Dally Average Supply and Disposition of Crude Oil and Petroleum Products 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products 6. PAD District II 7. PAD District III 8. PAD District III 9. PAD District IV 10. PAD District IV 11. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	iv ki
Crude Oil Supply and Disposition Crude Oil and Petroleum Products Imports Finished Motor Gasoline Supply and Disposition Distiliate Fuel Oil Supply and Disposition Residual Fuel Oil Supply and Disposition Liquefied Petroleum Gases Supply and Disposition Other Petroleum Products Supply and Disposition Sources. Detailed Statistics—November 1983 National Statistics 1. U.S. Petroleum Balance. 2. Supply and Disposition of Crude Oil and Petroleum Products. 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products. 4. Dally Average Supply and Disposition of Crude Oil and Petroleum Products. 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products 6. PAD District II. 7. PAD District II. 8. PAD District III. 9. PAD District III. 9. PAD District III. 10. PAD District IV. 11. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983 Natural Gas Processing 12. Plant Production of Petroleum Products	98
Distiliate Fuel Oil Supply and Disposition Residual Fuel Oil Supply and Disposition Liquefied Petroleum Gases Supply and Disposition Other Petroleum Products Supply and Disposition Sources. Detailed Statistics—November 1983 National Statistics 1. U.S. Petroleum Balance. 2. Supply and Disposition of Crude Oil and Petroleum Products. 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products. 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products. 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products 6. PAD District II. 7. PAD District II. 8. PAD District III. 9. PAD District IV. 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983 Natural Gas Processing 12. Plant Production of Petroleum Products	6
Other Petroleum Products Supply and Disposition Sources. Detailed Statistics—November 1983 National Statistics 1. U.S. Petroleum Balance. 2. Supply and Disposition of Crude Oil and Petroleum Products. 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products. 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products. 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products by PAD Districts 6. PAD District II. 7. PAD District III. 9. PAD District III. 9. PAD District IV. 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	11 13 15
National Statistics 1. U.S. Petroleum Balance. 2. Supply and Disposition of Crude Oil and Petroleum Products. 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products. 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products. 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products. 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products. Supply and Disposition of Crude Oil and Petroleum Products by PAD Districts 6. PAD District II. 7. PAD District III. 9. PAD District III. 9. PAD District IV. 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	17
National Statistics 1. U.S. Petroleum Balance	18 19
1. U.S. Petroleum Balance. 2. Supply and Disposition of Crude Oil and Petroleum Products. 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products. 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products. 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products. Supply and Disposition of Crude Oil and Petroleum Products by PAD Districts 6. PAD District II. 7. PAD District III. 8. PAD District III. 9. PAD District IV. 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	-
 Supply and Disposition of Crude Oil and Petroleum Products	00
3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products by PAD Districts 6. PAD District II	23 24
4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products. 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products. Supply and Disposition of Crude Oil and Petroleum Products by PAD Districts 6. PAD District II. 7. PAD District III. 9. PAD District IV. 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	
5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products Supply and Disposition of Crude Oil and Petroleum Products by PAD Districts 6. PAD District II	25
Supply and Disposition of Crude Oil and Petro- leum Products by PAD Districts 6. PAD District I. 7. PAD District III. 8. PAD District IIII. 9. PAD District IV 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	26 27
leum Products by PAD Districts 6. PAD District I. 7. PAD District II. 8. PAD District III. 9. PAD District IV 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	Æ1
7. PAD District II. 8. PAD District III. 9. PAD District IV. 10. PAD District V. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983. Natural Gas Processing 12. Plant Production of Petroleum Products	28
9. PAD District IV 10. PAD District V 11. Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983 Natural Gas Processing 12. Plant Production of Petroleum Products	29
Production of Crude Oil and Lease Condensate 11. Production by PAD District and State, February 1983 Natural Gas Processing 12. Plant Production of Petroleum Products	30 31
Production by PAD District and State, February 1983	32
February 1983	
12. Plant Production of Petroleum Products	33
	34
Refinery Operations by PAD District 13. Refinery Input of Crude Oil and Petro- leum Products	35
14. Refinery Production of Petroleum Products	36
15. Percent Refinery Yield of Petroleum Products	37

Contents (Continued)

	Page	
Imports and Exports of Crude Oil and Petro- leum Products	•	Figures
16. Imports by PAD District	38 39 43 44	Petroleum Overview
Stocks 20. Stocks of Crude Oil and Petroleum Products by PAD District	46	Motor Gasoline Supply and Disposition
Transportation of Crude Oil and Petroleum Products Between PAD Districts 21. Movements by Pipeline, Tanker and		Residual Fuel Oil Ending Stocks Liquefied Petroleum Gases Supply and Disposition
Barge	51 52 52	Liquefled Petroleum Gases Ending Stocks
Barge	53	
Heavy Fuel Oils by Sulfur Content 25. Production of Residual Fuel Oil	54 54 54 55	
Glossary		
Definitions of Petroleum Products and Other Terms	59 65	
Maps		
PAD Districts	66 67 68	
Explanatory Notes		
1. Data Collection Methodology 1.1 Weekly Petroleum Supply Reporting System (WPSRS) 1.2 Monthly Petroleum Supply Reporting System (MPSRS) 1.3 Census Import (IM-145) and Export (EM-522 and EM 594) Data 2. Supply 3. Domestic Crude Oil Production 4. Disposition	71 71 72 74 75 75 76	
 Stocks Average Stock Levels Movements Preliminary Monthly Statistics Notes on Tables 	76 76 77 77 77	

Page

12

12 14 14

16

16

Petroleum Focus



Petroleum Supply Summary

		December		C	umulative Jar hrough Decer	nuary nber
Average Volume for Period			%			%
(Million Barrels Per Day)	1983	1982	Change	1983	1982	Change
Products Supplied						
Motor Gasoline	6.6	6.5	1.0	6.6	6.5	0.9
Distillate Fuel Oil	3.3	2.9	13.8	2.7	2.7	0.1
Residual Fuel OII	1.4	1.6	- 13.1	- 1.4	1.7	19.1
Other Products	4.3	4.5	- 3.4	4.4	4.4	1.4
Total	15.6	15.5	0.6	15.1	15.3	- 1.3
Crude Inputs to Refineries	11.4	11.5	- 1.0	11.7	11.8	- 0.7
Production						
Crude Oil, Natural Gas						
Liquids, and Other	10.3	10.3	0.2	10.3	10.3	0,3
Imports						
Crude Oil ²	3.1	2.9	8,8	3.1	3.3	- 7.4
SPR	0.3	0.1	117.7	0.2	0.2	7.4 45.5
Products	0.3 1.5	1.6	- 3.8			
Total				1.7	1.6	2.6
iotai	4.9	4.6	7.3	5.0	5.1	- 2.5
Exports	•	• •				
Crude Oll	0.2	0.2	- 3.6	0.2	0.2	- 27.1
Products	0.5	0.7	- 25.9	0.6	0.6	- 1 ,4
Total	0.7	0.9	- 20.9	0.7	8.0	- 8.8
Stock Withdrawal						
Crude Oll ²	(s)	0.3		(s)	(s)	
Products	0.8	0.7		0.1	0.3	_
Stocks at End of Period (Million Barrels)						
Crude Oil		····				
SPR	378	294	28,8			
Other	349	350	NM			
Total	727	644	NM			
Products						
Motor Gasoline ³	228	235	NM			
Distillate Fuel Oil	144	179	NM			
Residual Fuel Oil	48	66	NM			
Other		306				
	331		NM			
Total	751	786	NM			
Total Crude Oil and Products	1,479	1,430	NM			

¹ Includes alcohol and other hydrocarbon liquids.

¹ includes alconor and other hydrocarbon liquids.
2 Excludes Strategic Petroleum Reserve (SPR).
3 Including blending components.
NM = Not meaningful due to new stock basis.
(s) = Less than 0.05 million barrels per day.
NOTE: Percent changes are based on unrounded values. December 1983 data are estimates based on weekly data, except for exports and NGL production estimates which are November 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.
Source: Energy Information Administration, Petroleum Supply Monthly, January 1984.



U.S. Petroleum Developments: 1983

Petroleum developments in 1983 continued to be characterized by declines in many areas, with modest upturns in others:

- Total 1983 petroleum consumption was below the 1982 level despite an upturn in consumption in the second half of 1983.
- Refinery capacity continued to decline, which in turn was reflected in higher utilization rates.
- · Net imports of crude oil continued to fall.
- Crude oil acquisition costs and refined product retail prices fell.
- The number of rotary rigs in operation reversed its steep downward trend.
- Motor gasoline consumption increased slightly, reversing last year's decline.

Petroleum Consumption

During 1983, petroleum consumption in the United States (measured as products supplied for domestic use) declined for the fifth consecutive year despite an

upturn in this series in the second half of 1983 (see Figure 1). Consumption averaged 15.1 million barrels per day, about 1 percent below consumption in 1982 and 20 percent less than in 1978, the peak demand year. During the second half of 1983, however, petroleum consumption averaged 15.3 million barrels per day compared with 14.9 million barrels per day in the first half of the year. Continued price decreases, as well as a strengthening of the economy starting in the third quarter of 1983, contributed to the modest upturn in consumption in the second half of the year.

Despite overall declines in consumption, petroleum remained the principal source of energy in the United States. About 43 percent of total U.S. energy consumption was accounted for by petroleum, nearly the same as in 1982 (see Figure 2). Petroleum's share of the energy market has declined, however, since 1978, when it reached a peak of 49 percent. This continued decline is the result of conservation efforts and fuel switching that stemmed from the rapid escalation of petroleum prices during the 1970's.

Figure 1. Petroleum Summary

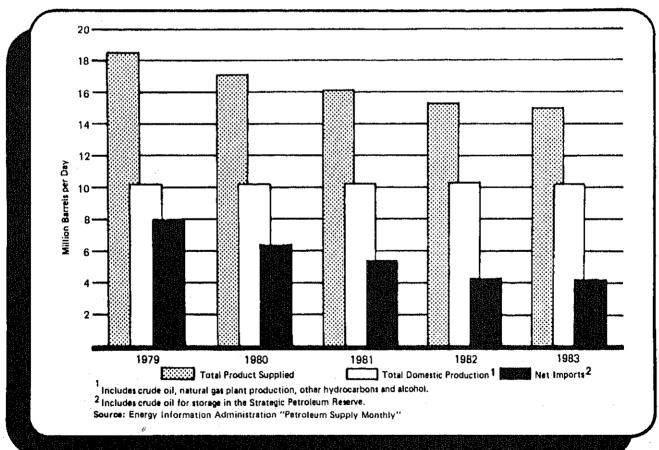
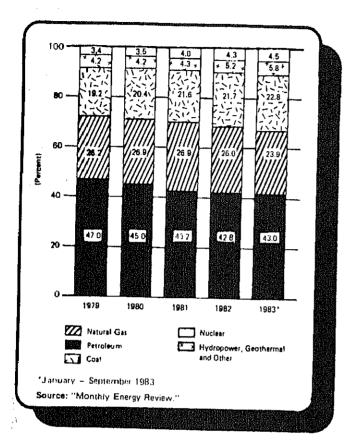


Figure 2. Consumption of Energy by Type



Finished motor gasoline supplied for domestic use increased slightly during 1983, averaging 6.6 million barrels per day compared with 6.5 million barrels per day in 1982 (see page 11). Consumption showed substantial gains beginning in June, averaging 6.7 million barrels for the period June through December. Despite seasonal variations and the effects of higher gasoline taxes, gasoline prices continued to subside in 1983 from their 1981 highs. While lower prices were evident in both 1982 and 1983, consumption did not begin to increase until 1983 when the economy began to improve.

Distillate fuel oil consumption, which averaged 2.7 millon barrels per day in 1983, showed almost no change over the 1982 average (see page 13). However, consumption during the second half of 1983 was about 9 percent higher than in the second half of 1982. The increase was associated with a strengthening of the economy.

Consumption of residual fuel oil continued the steady decline that started in 1978 when consumption averaged 3.0 million barrels per day. In 1983, residual fuel oil consumption averaged 1.4 million barrels per day, about 19 percent below the 1982 average (see page 15). Following the mild winter of 1982-1983, consumption remained considerably below historical levels, despite signs of economic recovery in the second half of 1983.

Fuel switching by electric utilities, the largest consumers of residual fuel oil, contributed to the decline in residual fuel oil consumption. Although the cost of generating electricity for utilities burning residual fuel oil declined in 1982 and the first half of 1983, it was still significantly higher than the cost of burning coal and natural gas.¹

Refinery Operations

The daily average total operable crude oil distillation capacity3 of petroleum refineries in the United States decreased by about 500 thousand barrels during 1983. This was the result of refinery closures and partial shutdowns as refiners continued to eliminate excess capacity and uneconomic facilities (see insert, next page). Many refiners also upgraded their downstream facilities in order to improve their ability to produce lighter products such as gasoline. Refinery utilization rates, which were persistently low through 1981 and 1982, increased throughout most of 1983. During September 1983, refiners operated at over 76 percent capacity, the highest level of utilization observed since June 1980. This was the result of increased inputs and significant refinery closings reported for that month. Crude oil inputs to refineries averaged 11.7 million barrels per day during the year, less than 1 percent below the 1982 average (see page 7).

Petroleum Stocks

Total petroleum stocks, excluding the Strategic Petroleum Reserve (SPR), decreased by about 67 million barrels during 1983, compared to the 1982 decline of 117 million barrels. About 66 million barrels of the 1983, decrease was in inventories of refined products. Total crude oil stocks (excluding SPR) declined slightly from 350 million barrels at the end of 1982 to 349 million barrels at the end of 1982 to 349 million barrels at the end of 1983 (see page 7). Crude oil stocks held in the Strategic Petroleum Reserve exceeded privately held crude oil stocks for the first time in the 7 years of SPR's existence (see insert, page xii).

At the end of 1983, stock levels of most major products were below the levels at the end of 1982. Distillate fuel oll inventories at 144 million barrels, were 23 percent below the level at the end of 1982; residual fuel oil inventories, at 48 million barrels, were 29 percent below the level at the end of 1982; motor gasoline inventories at 228 million barrels, were about 7 percent below the level at the end of 1982 (see pages 11-15). Although stocks have continued to decrease, supplies of petroleum products were adequate to meet demand given excess refining capacity, secure crude oil supplies and the availability of product imports.

¹Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, DOE/EIA-0191(82) (Washington, D.C.: 1983), pp. 10, 14, 16.

²Energy Information Administration, *Electric Power Quarterly*, DOE/EIA-0397(83/1Q and 2Q) (Washington, D.C.: 1983), pp. 10, 20.

³See Glossary, this issue, p. 62.

The continued decline in stock levels reflects structural changes in the petroleum industry. These changes have been in response to declining demand levels and product prices, increased raw material and operating costs, and other factors which have caused an increase in the cost of storing products.

As a result of industry changes in inventory management, the National Petroleum Council (NPC), at the request of the Secretary of Energy, conducted a study and developed new estimates for Minimum Operating Inventory (MOI) levels for crude oil and major fuel products. The MOI is defined as the inventory level below

which operating problems and shortages would begin to appear in a defined distribution system. The NPC revised the estimated MOI level for crude oil downward, from 290 million barrels to 285 million barrels. The motor gasoline MOI was also revised downward from 210 million barrels to 200 million barrels. The MOI for distillate fuel oil was reduced from 125 million barrels to 105 million barrels. The residual fuel oil MOI was lowered from 60 million barrels to 40 million barrels. A detailed discussion of the NPC study and changes to the MOI's is provided in the feature article of the December 1983 issue of the *Petroleum Supply Monthly*.

Update on Refinery Closings

As reported in the 1982 "Petroleum Supply Annual," there were 258 operable refineries in the United States on January 1, 1983. Since that time, the 11 refineries listed below, with a combined operable crude distillation capacity of more than 500,000 barrels per calendar day and total downstream capacity of more than 600,000 barrels per stream day, have been shut down. These data reflect closings through October 31, 1983. The Energy Information Administration anticipates additional refinery closings by the end of 1983, resulting in the further loss of nearly 75,000 barrels per calendar day of crude distillation capacity and approximately 70,000 barrels per stream day of downstream capacity. New construction and modifications at existing facilities, and resumed operations at refineries previously shut down, are expected to only partially offset the effects of these closings.

Refinery Closings Since January 1, 1983

Refiner	Location	Crude Oil Distillation Capacity	Downstream Capacity	Years in Operation
Anchor Refining Co., Inc.	McKittrick, California	9,000	7,000	5
Arizona Fuels Corp.	Fredonia, Arizona	6,000	E-17 A-16	11
Demenno-Kerdoon	Compton, California	10,000	2,000	6
Erickson Refining Corp.	Pt. Neches, Texas	000,00	***	4
GHR Energy Corp.	Good Hope, Louisiana	000,000	433,000	15
Independent Refining Corp.	Winnie, Texas	50,000	63,000	23
Marion Corp.	Theodore, Alabama	25,000	14,500	15
McTan Refining Corp.	St. James, Louisiana	19,300		6
Mobil Oil Corp.	Augusta, Kansas	60,000	83,900	25+
Shore, Inc.	Kilgore, Texas	550		3
Silver Eagle Oil, Inc.	La Barge, Wyoming	1,500	www Sider	9
Total		501,350	603,400	

Source: Energy Information Administration

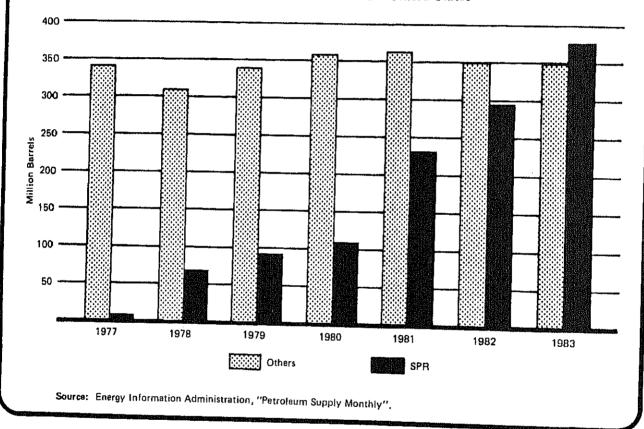
Strategic Petroleum Reserve

Two milestones occurred in the Strategic Petroleum Reserve (SPR) during the last quarter of 1983. In September SPR crude oil ending stocks reached 361 million barrels, exceeding privately held crude stocks for the first time in the 7 years of SPR's existence. The second event occurred in December when the SPR stocks reached 375 million barrels, the halfway mark of the 750 million barrel goal.

In response to the Arab oil embargo during 1973–1974, Congress passed the Energy Policy and Conservation Act (P.L. 94–163). Included in this legislation was the creation of the Strategic Petroleum Reserve program. With this Act, Congress required a reserve of up to one billion barrels of crude oil and/or petroleum products to be set aside to reduce the impact of any supply disruptions caused by international discords. The reserves can be withdrawn only after the President has determined such an action is necessary.

Currently the drawdown and distribution capability for the SPR is 1.7 million barrels per day. The plans call for an ultimate drawdown and distribution capability of up to 4.5 million barrels per day.

Year-End Stocks of Crude Oil in the United States



Imports

The downward trend in imports continued during 1983 as net imports (gross imports minus exports) of crude oil and petroleum products fell to an average of 4.2 million barrels per day, 2 percent below the average for 1982. During 1982, net imports averaged 20 percent below the 1981 level. This trend reflects the declining demand for petroleum products in the United States as well as the effort to reduce U.S. dependence on imports. The reduced dependence is most evident in the significant decline in the level of imports from members of the Organization of Petroleum Exporting Countries (OPEC) over the last four years. In 1983, 36 percent of U.S. petroleum imports came from OPEC nations, down from 67 percent in 1979 (see insert, page xlii).

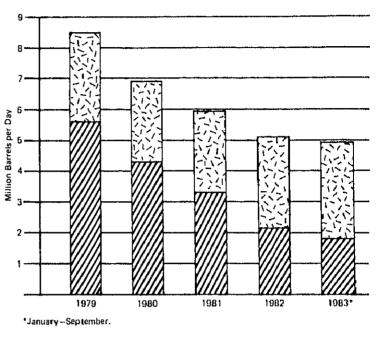
Net crude oil imports declined for the fourth straight year, averaging 3.1 million barrels per day, 3 percent below the 1982 average. Net imports of petroleum products averaged 1.1 million barrels per day in 1983, exhibiting little change from 1982. Although imports of motor gasoline and distillate fuel oil increased significantly, this was partially offset by a decrease in residual fuel oil imports. Residual fuel oil imports decreased from 567,000 barrels per day in 1982 to 494,000 barrels per day in 1983. Motor gasoline imports increased by 37 percent, from 177,000 barrels per day to 242,000 barrels per day, and imports of distillate fuel oil increased fivefold, from 20,000 barrels per day to 100,000 barrels per day. (see pages 11-15).

U.S. Dependence on Petroleum Imports Declines

Gross U.S. Petroleum Imports, by Source

OPEC Non-OPEC

U.S. imports of petroleum have declined steadily since 1979, reducing U.S. dependence on foreign crude oil and petroleum products. At the same time, there has been a dramatic shift in the sources of U.S. petroleum imports away from members of the Organization of Petroleum Exporting Countries (OPEC) countries. In 1983, 36 percent of U.S. petroleum imports were from OPEC sources, compared with 42 percent in 1982, 55 percent in 1981, 62 percent in 1980, and 67 percent in 1979.



Source: Energy Information Administration "Petroleum Supply Monthly"

Exports

Petroleum product exports during 1983 averaged 578,000 barrels per day, representing a slight decline from the 1982 level of 579,000 barrels per day. During the second half of 1983, exports exhibited a substantial downturn, averaging approximately 200,000 barrels per day below the first half of 1983. Although exports of distillate fuel oil and residual fuel oil showed slight decreases for the year, the increases in exports of petroleum coke and ilquefied petroleum gases partially offset these decreases.

Production

Domestic production of crude oil during 1983 was at its highest level since 1978, averaging 8.7 million barrels per day compared with 8.6 million barrels per day in 1982. Natural gas plant liquids production averaged 1.6 million barrels per day in 1983 about the same as in 1982.

Drilling activity in the United States during 1983 reversed the steep downward trend that began in the early months of 1982. The average number of rigs operating in December 1983 was 2,780 compared with 2,696 in December 1982.4 Well completions in the United States were down in 1983, however. The total number of wells completed during 1983 decreased 11 percent, from 85,802 in 1982 to 76,321 in 1983.5

Prices

Petroleum prices fell during 1983, for the second straight year, reflecting price decreases for both domestic and imported crude oil. The refiner acquisition cost of domestic crude oil averaged \$28.74 per barrel in November 1983, compared with \$31.57 per barrel a year earlier. The refiner acquisition cost of imported crude oil also decreased, averaging \$28.89 per barrel in November 1983 compared to \$33.09 per barrel in November 1982.8

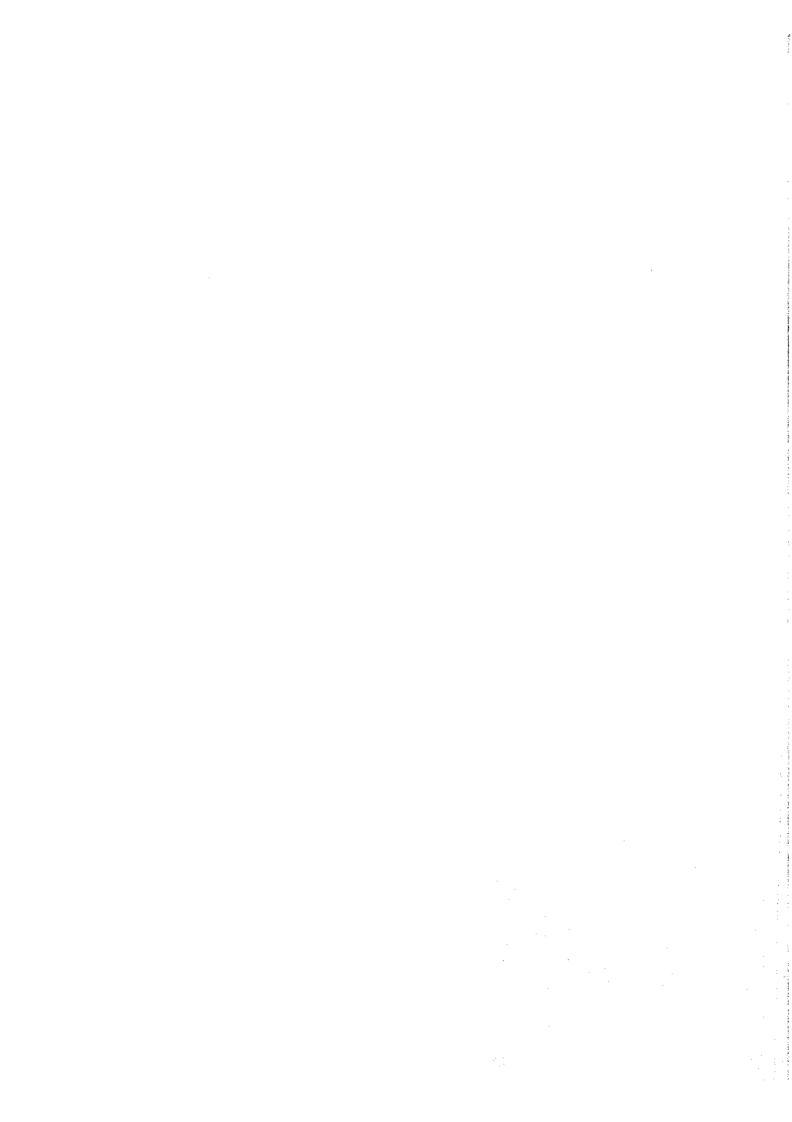
The average retail price of motor gasoline was below 1982 levels throughout most of 1983. In November, motor gasoline prices averaged \$1.22 per gallon, 4 percent below the November average in 1982 and 10 percent lower than the average in November 1981. Retail prices of residential heating oil followed a similar pattern in 1983, dropping from a high of \$1.15 per gallon in January to \$1.06 per gallon in September.

Average of weekly data reported for the period by Hughes Tool Company, Rotary Rigs Running-By State, (Houston, Texas: November 1982 - December 1983).

⁵American Petroleum Institute, Report on Drilling Activity in the United States, (Washington, D.C.: January 1982 - December 1983).

^{*}Energy Information Administration, Weekly Petroleum Status Report, DOE/EIA-0208 (84/03) (Washington, D.C. January 19, 1984), p. 17.

Weekly Petroleum Status Report, p. 17.



Summary Statistics

		Field Producti	on	Stock V	Vithdrawal ²		Ending Stocks ³
	Total Domestic ⁴	Crude Oll	Natural Gas Plant Production	Crude Oli ⁵	Petroleum Products	Petroleum Products Supplied	Crude Oil ⁵ and Petroleum Products
			Thousand Ba	rrels per Day			Million Barrels
1973 AVERAG		9,208	1,738	11	-146	17,308	1,008
1974 AVERAG	,	8,774	1,688	-62	-117	16,653	8 1,074
1975 AVERAGE		8,375	1,633	⁸ -17	⁸ −145	16,322	1,133
1976 AVERAGI		8,132	1,603	-39	96	17,461	1,112
1977 AVERAGI		8,245	1,618	-170	-378	18,431	1,312
1978 AVERAGI		8,707	1,567	-78	172	18,847	1,278
1979 AVERAGE		8,552	1,584	-148	-25	18,513	1,341
1980 AVERAGE	E 10,214	8,597	1,573	-98	-42	17,056	8 1,392
1981 January	10,231	8,540	1,652	⁸ 50	⁸ 1,159	10 100	
February	10,294	8,604	1,653	-278		18,430	1,388
March	10,272	8,613	1,624	-632	250	16,989	1,389
April	10,195	8,557	1,599		224	15,907	1,401
May	10,160	8,501	1,593	-595	148	15,350	1,415
June	10,287	8,629	1,594	-391	-374	15,353	1,438
July	10,098	8,500		-135	406	16,095	1,430
August	10,243	8,583	1,548	-360	91	15,682	1,439
September	10,281	8,604	1,614	397	-999	15,263	1,457
October	10,225		1,612	-285	-341	15,655	1,476
November	10,269	8,563	1,598	-760	477	15,822	1,485
December	10,220	8,586	1,630	-325	-233	15,593	1,501
AVERAGE		8,585	1,590	-170	745	16,596	1,484
	10,230	8,572	1,609	-290	130	16,058	.,
1982 January	10,128	8,509	1,578	-401	1 000	40.404	
February	10,312	8,702	1,563	-242	1,298	16,124	1,456
March	10,284	8,667	1,572	121	1,230	16,001	1,428
April	10,188	8,591	1,542	-37	1,047	15,560	1,392
May	10,244	8,683	1,518	29	1,583	16,046	1,346
June	10,212	8,646	1,511	40	-66	14,847	1,347
July	10,229	8,658	1,513		-489	14,998	1,360
August	10,215	8,634	1,524	-147	-926	14,821	1,393
September	10,279	8,701	1,518	-440	-44	14,839	1,408
October	10,299	8,701	1,530	263	-447	15,022	1,414
November	10,359	8,697	1,609	-548	-47	14,859	1,432
December	10,276	8,598	1,628	-398	-361	15,009	1,455
AVERAGE	10,252	8,649	1,550	128 -136	688	15,487	⁸ 1,430
1983 January	10.250	0.05	•		283	15,296	
February	10,356	8,634	1,668	-567	⁸ 865	14,765	1.450
March	10,298	8,660	1,585	-382	1,128	14,772	1,453
April	10,259	8,677	1,544	56	1,765	15,484	1,432
May	10,229	8,686	1,502	-438	431		1,375
June	10,231	8,682	1,483	68	-759	14,779	1,376
July	10,262	8,676	1,514	-163	-242	14,250	1,397
August	10,237	8,647	1,536	118	-922	15,281	1,409
September	10,257	8,653	1,561	-781	-922 -289	14,913	1,434
October	10,323	8,666	1,598	-191	-209 -634	15,366	1,467
	10,317	8,654	1,604	-180		15,396	1,492
November*	10,310	8,624	1,636	R 182	-456	14,947	1,512
December**	NA	8,612	NA	-233	R -128	R 15,533	R 1,510
AVERAGE	NA	8,656	NA	-209	838	15,583	1,479
	ondensate.		* *	~~7	128	15,090	

Includes lease condensate.

A negative number indicates an increase in stocks and a positive number indicates a decrease.

Stocks are totals as of end of period.

Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

Includes stocks located in the Strategic Petroleum Reserve.

Includes crude oil for storage in the Strategic Petroleum Reserve.

Includes crude oil for storage in the Strategic Petroleum Reserve.

In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Crude Oil¹ and Petroleum Products Overview (continued)

			Imports			Exports	1	
		Total	Crude Oil ⁶	Petroleum Products	Total	Crude Oil	Petroleum Products	Net ⁷ Import
		<u>'</u>		Thous	and Barrels pe	r Day		
973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025
974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892
975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846
976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090
977	AVERAGE	8,807	6,615	2,193	243	50	193	8,5 6 5
978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002
979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984
980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365
981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
			4,179	1,588	644	204	440	5,123
	August	5,767 6,365	4,179 4,740	1,624	519	194	325	5,845
	September	•		1,579	738	226	512	5,221
	October	5,959	4,380		701	278	423	5,041
	November	5,741	4,046	1,695	656	189	467	5,187
	December	5,843	4,137	1,706	595	228	367	5,401
	AVERAGE	5,996	4,396	1,599	290	220	301	0,401
982	January	5,332	3,693	1,639	829	238	591	4,503
	February	4,807	2,990	1,817	804	304	499	4,003
	March	4,484	2,874	1,610	882	321	561	3,602
	April	4,378	2,849	1,529	786	174	611	3,593
	May	4,811	3,309	1,503	803	262	542	4,008
	June	5,327	3,836	1,491	703	94	609	4,624
	July	5,890	4,248	1,642	741	229	512	5,149
	August	5,244	3,851	1,392	858	304	554	4,386
	September	5,414	3,636	1,778	791	184	606	4,624
	October	5,306	3,670	1,636	932	270	662	4,374
	November	5,744	3,862	1,882	786	262	524	4,958
	December	4,606	3,000	1,605	860	193	667	3,746
	AVERAGE	5,113	3,488	1,625	815	236	579	4,298
983	January	4,372	2,938	1,434	973	117	856	3,399
	February	3,691	2,268	1,423	865	262	603	2,825
	March	3,629	2,232	1,398	801	174	627	2,829
	April	4,744	3,154	1,590	809	88	721	3,935
	May	4,898	3,234	1,664	848	280	568	4,049
	June	5,218	3,502	1,716	774	144	630	4,443
	July	5,690	3,868	1,822	571	145	426	5,119
	August	6,036	4,174	1,863	663	172	491	5,373
	September	6,088	4,221	1,867	684	177	507	5,403
	October	5,256	3,446	1,810	576	140	436	4,680
	November*	R 5,168	R 3,312	R 1,856	679	186	494	4,489
	December**	4,944	3.400	1,544	NA	NA	NA	NA
	AVERAGE	4,985	3,318	1,667	NA	NA	NA	NA

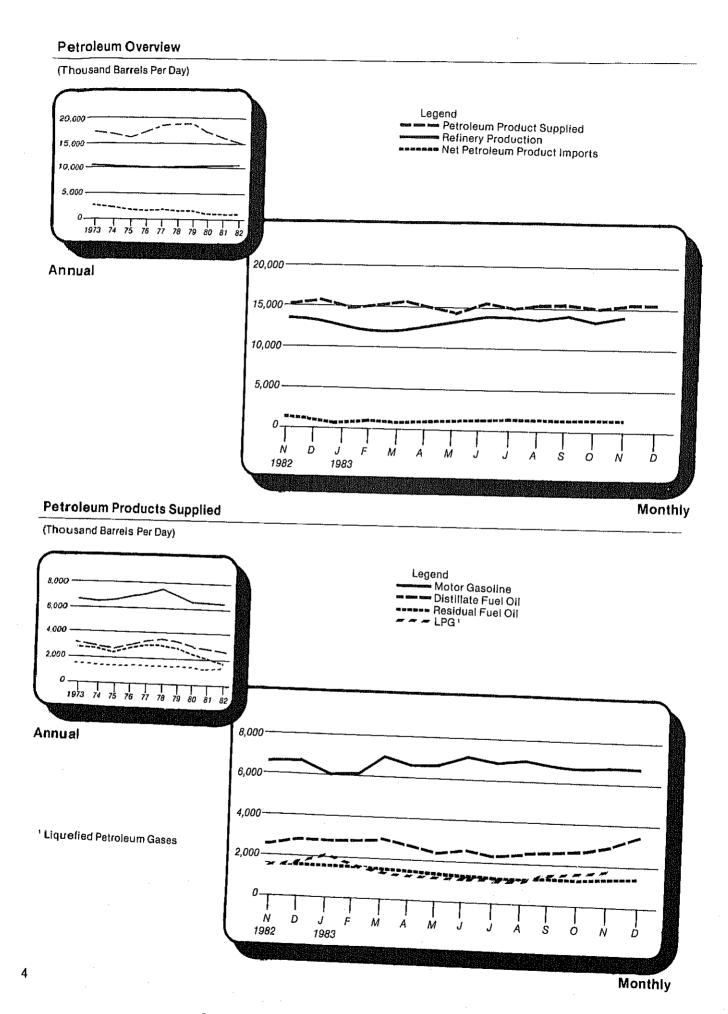
Footnotes continued.

* See Explanatory Note 9.1.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

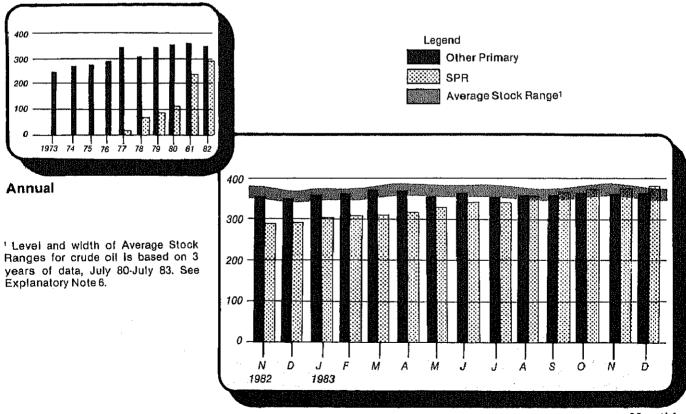
R = Revised data. NA = Not available.

Note: Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components due to independent rounding. Sources: See the last page of this section.



Crude Oil Supply and Disposition

(Thousand Barrels Per Day) Legend Refinery Inputs ---- Domestic Crude Oil Production 12,500 - Net Imports ' 10,000 7,500 5,000 2,500 76 77 78 79 80 81 12,500 Annual 10,000 1 Excludes SPR Imports 7,500 5,000 2.500 1982 1983 Monthly **Crude Oil Ending Stocks** (Million Barrels)



				5	Supply				
	Field Pr	Field Production Imports Stock Withdrawai ³							
	Total Domestic	Alaskan	Total	SPR ⁴	Other	SPR4	Other	Unac- counted for Crude Oil	
				Thousand I	Barrels per D	ay			
1973 AVERAGE 1974 AVERAGE 1975 AVERAGE 1976 AVERAGE 1977 AVERAGE 1978 AVERAGE	9,208 8,774 8,375 8,132 8,245 8,707	198 193 191 173 464	3,477 4,105 5,287 6,615	21	3,244 3,477 4,105 5,287 6,594	20	11 -62 -17 -39 -150	3 -25 17 77 -6	
1979 AVERAGE	8,552	1,229 1,401	6,356	162	6,195	~163	84	-57	
1980 AVERAGE	8,597	1,617	6,519	67	6,452	-67	-81	-11	
	0,001	1,017	5,263	44	5,219	-45	-52	34	
1981 January	8,540	1,606	4,932	106	4,826	a #- 2	0		
February	8,604	1,619	4,873	80	4,793	-151	⁶ 201	113	
March	8,613	1,618	4,521	140	4,793	-127	-150	-41	
April	8,557	1,608	4,338	272	4,066	-155	-477	154	
May	8,501	1,580	4,287	386	3,901	-444	-151	51	
June	8,629	1,632	4,061	318	3,743	-513	122	286	
July	8,500	1,605	4,296	175		-434	299	49	
August	8,583	1,602	4,179	257	4,121	-324	-36	147	
September	8,604	1,607	4,740	435	3,922	-372	769	16	
October	8,563	1,596	4,380	453	4,305	-486	201	-295	
November	8,586	1,614	4,046	271	3,927	-501	-259	166	
December	8,585	1,623	4,137	165	3,774	-259	-66	279	
AVERAGE	8,572	1,609	4,396	256	3,971 4,141	-252	82	52	
982 January			.,		4, 14 1	-336	46	83	
February	8,509	1,705	3,693	170	3,523	-159	040	40.4	
March	8,702	1,707	2,990	159	2,830	-213	-242	101	
April	8,667	1,696	2,874	185	2,689	-235	-29	156	
Мау	8,591	1,691	2,849	190	2,659	-233	357	_ 2	
June	8,683	1,707	3,309	204	3,105	-233 -176	196	231	
July	8,646	1,665	3,836	105	3,732	-176 -105	205	111	
August	8,658	1,710	4,248	97	4,150	-105 -97	144	133	
September	8,634	1,697	3,851	208	3,643		-50	-20	
October	8,701	1,705	3,636	139	3,497	-208	-232	189	
November	8,701	1,706	3,670	216	3,454	-143	406	-210	
December	8,697	1,676	3,862	180	3,683	-216 170	-332	249	
AVERAGE	8,598	1,682	3,000	124	2,877	-179	-219	-124	
ATTINGE.	8,649	1,696	3,488	165	3,323	-125 -174	252	35	
83 January	0.004				0,020	-1/4	38	71	
February	8,634	1,698	2,938	219	2,720	-219	0.40		
March	8,660	1,725	2,268	197	2,071		-348	238	
April	8,677	1,726	2,232	201	2,031	-197 194	-185	423	
Мау	8,686	1,710	3,154	205	2,949	-184	240	134	
June	8,682	1,710	3,234	289	2,945	-197	-241	191	
July	8,676	1,710	3,502	190	3,312	-293	362	148	
August	8,647	1,705	3,868	274	3,594	-188	25	480	
September	8,653	1,712	4,174	350	3,823	-264	382	-74	
October	8,666	1,722	4,221	309	3,912	-358	-423	333	
November*	8,654	1,731	3,446	202		-307	116	6	
December**	8,624	1,713	R 3,312	R 171	3,244 R 3,141	-201	_ 21	69	
AVERAGE	8,612	1,713	3,400	270	3,129	R -135	R 317	137	
	8,656	1,715	3,318	240		-229	-4	ŇA	
Includes lease cond			,	~70	3,078	-232	23	NA	

<sup>Includes lease condensate.
Stocks are totals as of end of period.
A negative number indicates an increase in stocks and a positive number indicates a decrease.
Strategic Petroleum Reserve.
Begining in January 1983, crude oil used directly as fuel is shown as product supplied.
Stocks of Alaskan crude oil in transit were included in January 1981. Stock withdrawals are calculated using new basis stock levels. See Explanatory Note 11.
Footnotes continued on following page.</sup>

Crude Oil¹ Supply and Disposition (continued)

		Supply		Dispo	sition		Er	nding Stock	s 2
		Crude Used Directly ⁵	Crude Losses	Refinery Inputs	Exports	Products Supplied ⁵	Total Crude Oll	SPR4	Other Primary
		,	Thous	and Barrels p	er Day		M	illion Barrel	8
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	265		265
1975	AVERAGE	-17	13	12,442	6	NA NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA NA	6 466	108	6 358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	362
	September	-61	4	12,505	194	NA.	555	199	356
	October	-63	3	12,057	226	NA NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA NA	594	230	
	AVERAGE	-58	5	12,470	228	NA	584	230	36 3
1982	January	-63	3	11,599	238	NA	606	235	3 71
	February	-64	2	11,236	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA NA	608	264	344
	July	-60	3	12,446	229	NA NA	613	267	346
	August	-57	2	11,871	304	NA NA	626	274	353
	September	-56	4	12,146	184	NA NA	619	274	
	October	-51	2	11,749	270	NA NA			341
	November	-51	1	11,724	262		636	285	351
	December	-51 -53	1			NA	648	290	358
	AVERAGE	-59	3	11,514 11,774	193 236	NA NA	644	294	350
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March	NA	2	10,854	174	70	670	312	359
	April	NA	2	11,436	88	68	684	318	366
	May	NA	1	11,789	280	63	681	327	355
	June	NA NA	i	12,287	144	64	686	332	354
	July	NA	2	12,347	145	65	683	332 341	
	August	NA	1	12,141	172	64			342
	September	NA NA					707	352	355
	•		1	12,445	177	66	713	361	352
	October	NA	1	11,784	140	63	718	367	351
	November*	NA	2	R 12,003	186	64	R 713	371	R 341
	December**	NA NA	NA	11,404	NA	NA	727	378	349
	AVERAGE	NA	NA	11,688	NA	NA			

Footnotes continued.

* See Explanatory Note 9.2.

** Italics denote estimates based upon preliminary data. See Explanatory Note 8.

R = Revised data. NA = Not available.

Note: Geographic coverage is the 50 States and the District of Columbia.

Totals may not equal sum of components due to independent rounding.

Sources: See the last page of this section.

			······································			mnorts fer	om OPEC	Sources ¹				
				ſ	United	inports Iff	JIII OPEC	oources1			 	
		Algeria	Libya	Saudi Arabia	Arab Emirates	indo- nesia	Iran	Nigeria	Vene- zuela	Other OPEC ²	Total OPEC	Total Arab OPEC ³
						Thousand	d Barrels	per Day	<u> </u>			
1973	AVERAGE	136	164	486	71	213	223	459	1,135	100		
1974	AVERAGE	190	4	461	74	300	469	713	979	106	2,993	915
1975	AVERAGE	282	232	715	117	390	280	762	702	88	3,280	752
1976 1977	AVERAGE	432	453	1,230	254	539	298	1,025	702 700	122	3,601	1,383
1978	AVERAGE	559	723	1,380	335	541	535	1,143	690	134	5,066	2,424
1979	AVERAGE	649	654	1,144	385	573	555	919	645	287	6,193	3,185
1980	AVERAGE	636	658	1,356	281	420	304	1,080	690	226	5,751	2,963
1900	AVERAGE	488	554	1,261	172	348	9	857	481	212 130	5,637 4,300	3,056
1981 J	anuary	341	500	1,284	93	424	^				•	2,551
	ebruary	381	468	1,122	93	406	0	908	549	27	4,127	2,219
	larch	352	485	1,027	47	328	0	866	463	92	3,891	2,064
	pril	263	485	1,034	68	307	0	771	360	54	3,425	1,912
	lay	393	443	933	17	297	0	812	237	39	3,245	1,867
	rne	356	380	865	60	367	0 0	664	331	124	3,203	1,796
	yly	333	251	1,073	80	340		528	248	118	2,922	1,703
Αι	ugust	348	274	1,082	61	377	0 0	651	466	38	3,233	1,757
	eptember	336	154	1,477	96	371	0	321	523	84	3,070	1,765
	ctober	242	147	1,342	90	427	0	323	359	149	3,264	2,063
No	ovember	210	132	1,270	112	353	0	412	389	172	3,220	1,820
De	ecember	176	122	1,045	158	400	0	517	535	56	3,184	1,724
	AVERAGE	311	319	1,129	81	366	Ô	684 620	411 406	132 90	3,129 3,323	1,502 1 ,848
1982 Ja	inuary	254	161	877	111	289	0	000			0,020	1,040
Fe	bruary	139	92	693	89	244	0	663	376	128	2,859	1,403
	arch	91	37	555	155	200	0	584	355	102	2,297	1,054
Ap		85	0	511	122	215	0	522	399	91	2,051	860
Ma		179	0	601	116	236	0	427	426	85	1,871	740
Jur		115	0	593	94	215	72	222	422	54	1,830	897
Jul	•	159	0	660	108	327	6 9	537	361	110	2,096	820
	gust	181	0	489	133	271	27	910 574	356	95	2,685	965
	ptember	179	0	432	57	191	21	374 477	299	133	2,107	818
	tober	249	7	494	61	242	108	313	518	69	1,943	677
	vember	247	14	489	47	283	34	479	504	106	2,084	810
	cember	155	0	237	12	265	88	462	528 399	115	2,235	797
A	VERAGE	170	26	552	92	248	35	514	412	73 97	1,690 2,146	421 854
1983 Jan	uary	204	0	282	47	055					-, · · · ·	
	ruary	104	ő	214	<u> </u>	255	43	186	324	43	1,384	533
Mar	rch	63	ő	103	9	217	0	92	371	28	1,035	326
Apri		228	ő	180	0	138	0	121	425	173	1,023	183
May	<i>†</i>	284	ő	122	(⁵)	210	0	186	508	125	1,438	409
June		300	0	175	12	324	37	352	444	69	1,645	419
July		282	Ő	182	40 50	502	38	402	335	146	1,938	515
Aug		370	Ö	426	58	464	112	525	431	187	2,240	599
Sep	tember	413	Ö	587	45 21	416	213	464	477	230	2,641	866
Octo		261	Ö	638	21	516	86	324	472	208	2,627	1,074
	ember	165	ŏ	545	16 56	368	12	307	337	169	2,108	938
AV	ERAGE	244	ŏ	314	56	318	21	214	435	135	1,891	789
			•	014	28	339	52	290	415	138	1,821	606

Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.
 Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.
 Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

Footnotes continued on following page.

Crude Oil and Petroleum Product Imports (continued)

					li	mports fron	n Non-OPE	C Sources	4			
		Baha- mas	Canada	Mexico	Nether- lands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non OPEC	Total Non OPEC	Total Imports
			<u> </u>			Thousa	nd Barrels	per Day				
1973	AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263	6,256
1974	AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832	6,112
1975	AVERAGE	152	846	71	332	242	14	90	406	300	2,454	6,056
1976	AVERAGE	118	599	87	275	274	31	88	422	353	2,247	7,313
1977	AVERAGE	171	517	179	211	289	126	105	466	550	2,614	8,807
1978	AVERAGE	160	467	318	229	253	180	94	429	484	2,613	8,363
1979	AVERAGE	147	538	439	231	190	202	92	431	548	2,819	8,456
1980	AVERAGE	78	455	533	225	176	176	88	388	491	2,609	6,909
1981	January	39	543	401	198	150	233	89	494	552	2,701	6,827
F	ebruary	84	546	437	227	163	271	46	481	626	2,881	6,772
N	/larch	74	472	488	227	93	263	45	370	571	2,603	6,028
P	April	68	412	418	198	139	402	40	365	380	2,423	5,668
N	Лау	122	365	522	213	105	368	5 8	344	474	2,573	5,775
	lune	51	353	538	196	124	397	67	262	525	2,513	5,435
J	luly	77	382	384	212	178	553	50	206	541	2,583	5,816
	August	69	3 78	489	255	123	592	68	184	539	2,698	5,767
	September	111	423	708	163	169	528	72	265	661	3,100	6,365
	October	63	449	669	161	121	351	60	303	562	2,739	5,959
	November	63	547	628	168	108	253	76	294	421	2,557	5,741
C	December	70	501	587	148	125	280	73	367	563	2,714	5,843
	AVERAGE	74	447	522	197	133	375	62	327	534	2,672	5,996
	January	58	513	425	179	106	346	62	334	452	2,474	5,332
	February	67	537	476	221	120	181	38	362	508	2,510	4,807
	/larch	43	437	503	189	118	294	62	307	480	2,433	4,484
	\pril	82	360	476	184	. 166	247	36	266	690	2,507	4,378
	Иay	77	419	766	152	95	516	47	302	607	2,981	4,811
	lune	32	481	797	148	129	557	58	322	708	3,231	5,327
	luly	64	536	783	158	118	433	38	376	698	3,204	5,890
	August	80	443	853	145	106	520	24	317	650	3,137	5,244
	September	92	493	897	195	89	631	51	278	746	3,472	5,414
	October	45	459	682	148	109	666	52	262	801 706	3,222	5,306 5,744
	Vovember	51	553	860	212	90	623	81	334	480	3,508	
Ĺ	December	88	561	689	174	102	438	48	336	460 627	2,916	4,606 5 ,113
•	AVERAGE	65	482	685	175	112	456	50	316	021	2,968	3 , 1 13
	January	68	536	849	218	73	315	40	299	588	2,988	4,372
	ebruary	92	592	722	179	81	193	50	192	554	2,655	3,691
	∕larch	86	488	760	187	78	240	43	162	563	2,606	3,629
	April	167	452	981	216	85	421	20	183	781	3,306	4,744
	v lay	135	501	944	153	108	483	42	235	651	3,252	4,898
	lune	137	576	831	181	120	424	48	252	712	3,281	5,218
	July	69	633	849	191	103	369	37	364	836	3,450	5,690
	August	142	540	891	194	90	461	40	313	725	3,395	6,036
	September	137	523	832	251	82	472	33	308	822	3,461	6,088
(October	164	539	771	172	106	414	48	370	565	3,149	5,256
1	Vovember	143	542	717	144	110	334	55	440	793	3,278	5,168
	AVERAGE	122	538	832	190	94	376	41	284	690	3,168	4,989

Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

^{(*) =} Less than 500 barrels.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Totals may not equal sum of components due to independent rounding.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See the last page of this section.

		Supply			Di	sposition		Ending	Stocks1
	Total Produc-		Stock With-			Product Suppli	ed	Total	Finished
	tion	imports ²	drawal ² ³	Exports	Total	Unleaded ⁴	Unleaded	Motor Gasoline ⁵	Motor Gasoline
		··· ·	Thousand Ba	arrels per Da	ау		Percent of Total	Million	Barrels
1973 AVERAGE 1974 AVERAGE	-,	134	9	4	6,674	NA	ALA		
	6,360	204	-24	2	6,537		NA	209	
	6,520	184	6 -28	2	6,675		NA	6 218	
	6,841	131	10	3	6,978		NA	235	
	7,033	217	~72	2	7,177		NA	231	
	7,169	190	54	1	7,412	1,976	27.5	258	
1979 AVERAGE	6,852	181	2	(s)		2,521	34.0	238	
1980 AVERAGE	6,506	140	-66	1	7,034 6,579	2,798 3,067	39.8	237	
1981 January ⁷	0745			•	0,073	3,007	46.6	⁶ 261	
February	6,715	138	6 -421	(S)	6,431	3,141	48.8	070	
	6,308	111	-1 18	1	6,301	3,095		276	227
March April	6,213	171	-81	(s) (s)	6,303	3,095 3,097	49.1	284	230
•	6,114	186	303	(e)	6,602		49.1	285	232
May	6,122	150	344	1	6,615	3,284	49.7	272	223
June	6,220	186	622	i		3,115	47.1	259	213
july	6,405	151	268	(s)	7,028	3,419	48.6	242	194
August	6,611	124	-95		6,823	3,424	50.2	228	186
September	6,564	169	-70	3	6,637	3,344	50.4	233	189
October	6,426	147	7	2	6,662	3,338	50.1	237	191
November	6,564	148	-33 8	3	6,578	3,257	49.5	236	190
December	6,586	197		. 1	6,373	3,198	50.2	248	201
AVERAGE	6,405	157	-91	11	6,681	3,444	51,5	253	
	5,100	137	28	2	6,588	3,264	49.5	200	203
1982 January	6,167	128	-316	10	5.55 .				
February	5,899	133	172	18	5,961	3,067	51.5	261	213
March	5,994	183	334	8	6,196	3,210	51.8	257	208
April	6,095	185		44	6,466	3,358	51.9	247	198
May	6,319	182	650 133	33	6,897	3,495	50.7	221	
June	6,754	230	177	23	6,655	3,415	51.3	214	179
July	6,768		-134	14	6,835	3,565	52.2		173
August	6,419	225	-178	24	6,790	3,577	52.7	219	177
September	6,527	291	-81	16	6,614	3,526	53.3	226	183
October	6,262	223	-198	22	6,531	3,404	53.3 52.1	227	185
November		185	-42	15	6,391	3,351		234	191
December	6,273	211	101	11	6,574	3,451	52.4	234	192
AVERAGE	6,542	178	-165	7	6,549	3,485	52.5	230	189
ATENAGE	6,338	197	25	20	6,539	3,409	53.2	⁶ 235	⁶ 194
83 January	6,020	1.40	6 400		, -	0,700	52.1		
February	5,848	148	⁶ -186	(s)	5,981	3,352	56.0	054	
March	5,897	142	32	(s)	6,022	3,257	54.1	251	208
April	6,202	205	765	23	6,843	3,620	52.9	251	207
May	6.202	273	27	1	6,501	3,505		224	184
June	6,386	284	-128	1	6,540		53.9	221	183
July	6,646	265	118	22	7,008	3,547	54.2	225	187
August	6,704	297	-210	18	6,773	3,796	54.2	223	183
September	6,539	260	159	13	6,946	3,752	55.4	231	190
October	6,582	285	-160	14	6,693	3,836	55.2	226	185
	6,188	335	60	2		3,671	54.8	230	190
November*	R 6,636	R 269	R -274		6,581	3,698	56.2	228	188
December**	6,310	241	71	2	R 6,629	R 3,714	56.0	236	196
AVERAGE	6,332	251	24	NA NA	6,614	NA	NA	228	191
	s of end of perio		= -7	NA	6,598	NA	NA	-	101

Stocks are totals as of end of period.

Beginning in 1981, excludes blending components.

A negative number indicates an increase in stocks and a positive number indicates a decrease.

Includes gasonu.

Includes motor gasoline blending components.

In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

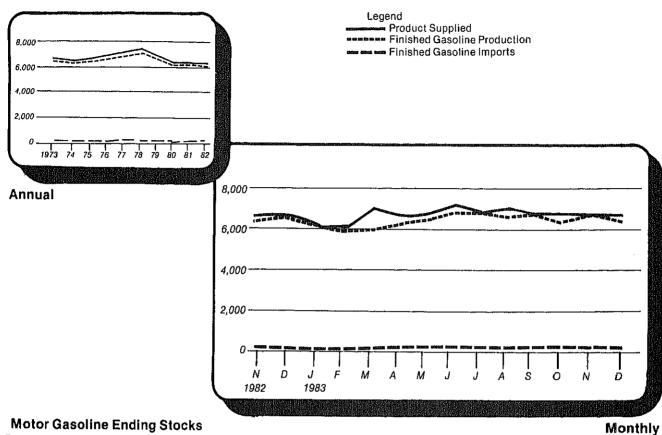
Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

See Explanatory Note 9.3.

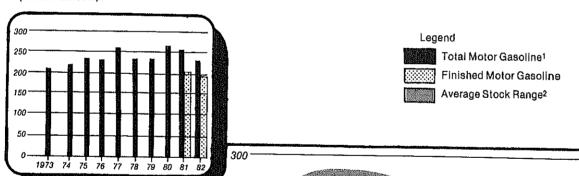
** Italics denote estimates based upon preliminary data. See explanatory Note 8.

R = Revised Data. NA = Not available. (s) = Less than 500 barrels per day. Note: Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components due to independent rounding. Sources: See the last page of this section.





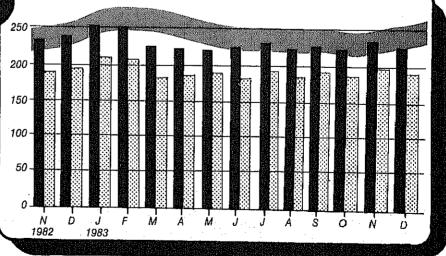
(Million Barrels)



Annual

1 Includes finished motor gasoline blending components

² Level and width of Average Stock Range for total motor gasoline based on 3 years of data, July 80-June 83. See Explanatory Note 6.



Monthly

		St	ірріу		Disp	osition	Ending Stocks ¹
	Total Production	lmports	Stock Withdrawai ²	Crude Used Directly ³	Exports	Products Supplied ³	
			Thousand Bar	rels per Day			Million Barrels
1973 AVERAGE	2,822	392	-115	2	9	3,092	196
1974 AVERAGE	2,669	289	-9	2	2	2,948	4 200
1975 AVERAGE	2,654	155	4 40	2	1	2,851	209
1976 AVERAGE	2,924	146	62	1	1	3,133	186
1977 AVERAGE	3,278	250	-176	1	1	3,352	250
1978 AVERAGE	3,167	173	93	1	3	3,432	216
1979 AVERAGE	3,153	193	-34	1	3	3,311	229
1980 AVERAGE	2,662	142	64	1	3	2,866	4 205
1981 January5	2,989	273	4 836	11	(8)	4,109	179
February	2,809	325	246	11	17	3,373	173
March	2,484	147	264	9	(8)	2,904	164
April	2,418	116	-9	10	`´3	2,532	165
May	2,454	179	-232	10	(s)	2,411	172
June	2,501	225	-270	9	(s)	2,464	180
July	2,395	179	-204	10	` 2	2,378	186
August	2,656	174	-450	8	(s) _	2,388	
September	2,610	129	-235	10	1		200
October	2,485	119	197	9	5	2,513	207
November	2,716	124	36	11		2,803	201
December	2,856	95	277		6	2,880	200
AVERAGE	2,613	173	38	†1 10	26 5	3,212 2,829	192
982 January	2,591	97	876	10	00	•	
February	2,427	132	605		90	3,484	164
March	2,288	48	682	11	90	3,085	147
April	2,358	59		10	84	2,945	126
May	2,618	74	612	13	64	2,978	108
June	2,729	102	-183	10	75	2,444	114
July	2,734		-335	10	55	2,452	124
August	2,507	125	-789	11	24	2,058	148
September	2,657	80	-339	10	40	2,218	159
October	2,838	61	-85	12	139	2,507	161
November		91	-289	8	66	2,581	170
December	2,860	145	~514	8	24	2,475	186
AVERAGE	2,655	109	225	10	143	2,855	4 179
	2,606	93	35	10	74	2,671	175
983 January February	2,314	58	4 561	NA	173	2,760	168
	2,136	58	742	NA	105	2,832	
March	1,991	42	926	NA	59		147
April	2,169	73	518	NA	47	2,900	119
May	2,444	141	-193	NA	50	2,713	103
June	2,545	175	-154	NA	40	2,341	109
July	2,600	259	-556	NA NA		2,526	114
August	2,612	302	-403	NA NA	55	2,248	131
September	2,725	253	-374		43	2,467	144
October	2,682	255	-275	NA	37	2,568	155
November*	R 2,679	R 189		NA	55	2,606	163
December**	2,566	170	R 65	NA	54	R 2,879	R 161
AVERAGE	2,457	165	<i>560</i> 114	NA	NA	3,250	144
•		100	114	NA	NA	2,673	

Stocks are totals as of end of period.
 A negative number indicates an increase in stocks and a positive number indicates a decrease.
 Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.
 In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
 Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

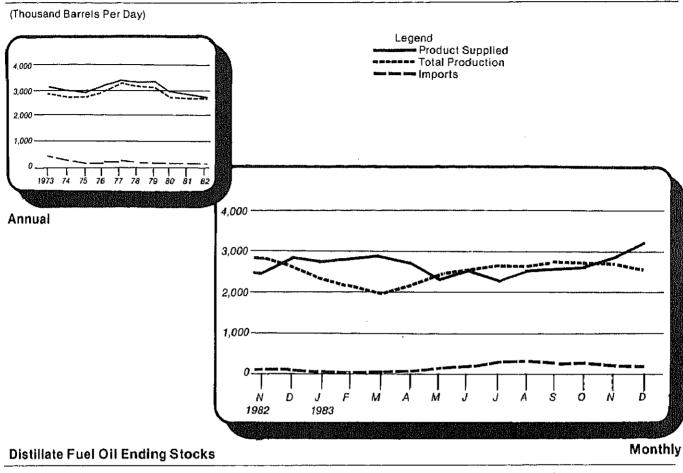
^{*} See Explanatory Note 9.4.

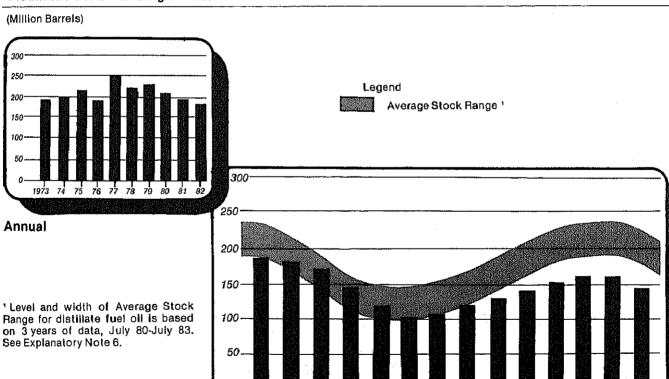
* Italics denote estimates based on preliminary data. See Explanatory Note 8.

R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.

Note: Geographic coverage is the 50 states and the District of Columbia. Totals may not equal sum of components due to independent rounding. Sources: See the last page of this section.

Distillate Fuel Oil Supply and Disposition





Month

1983

1982

	Supply				Disposition		Ending Stocks ¹
	Total Produc- tion	Imports	Stock Withdrawal ²	Crude Used Directly ³	Exports	Products Supplied ³	
		Thousand Barrels per Day					
1973 AVERAGE	971	1,853	5	17	23	2,822	53
1974 AVERAGE	1,070	1,587	-17	13	14	2,639	4 60
1975 AVERAGE	1,235	1,223	4 2	15	15	2,462	74
1976 AVERAGE	1,377	1,413	5	17	12	2,801	72
1977 AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978 AVERAGE	1,667	1,355	-1	13	13	3,023	90
1979 AVERAGE	1,687	1,151	-15	12	9	2,826	96
1980 AVERAGE	1,580	939	10	12	33	2,508	4 92
1981 January ⁵	1,612	1,015	4 202	0.0	0.5		
February	1,565	1,015 954	4 302	32	65	2,896	82
March	1,365 1,424		150	44	125	2,588	78
April	1,320	699 584	100	48	145	2,126	75
May			66	49	151	1,868	73
June	1,223	741	-170	49	25	1,817	78
	1,232	540	291	49	76	2,037	69
July	1,174	830	2	48	82	1,971	69
August	1,231	819	-179	50	69	1,852	75
September	1,292	841	-176	51	126	1,882	80
October	1,238	786	8	54	202	1,884	80
November	1,227	880	-49	53	203	1,909	81
December	1,329	916	110	52	157	2,250	78
AVERAGE	1,321	800	37	48	118	2,088	78
1982 January	1,235	831	301	50			
February	1,186	956	363	53	235	2,185	69
March	1,123	912	12	53	213	2,344	58
April	1,166	788		53	197	1,903	58
May	1,128	742	150	52	234	1,923	54
June	1,074	652	-172	52	191	1,560	59
July	1,028	657	-57	50	217	1,501	61
August	965	551	56	49	239	1,550	59
September	1,008		203	47	235	1,531	53
October	955	872	-306	44	148	1,470	62
November	989	783	-57	43	2 34	1,490	64
December	989	837	-94	43	182	1,591	66
AVERAGE	1,070	747 776	6	43	186	1,598	⁴ 66
***		770	32	48	209	1,716	
983 January	935	691	4 243	NA	004		
February	857	632	270		294	1,574	61
March	833	686	220	NA	191	1,568	53
April	942	743	-10	NA	169	1,569	46
May	930	709	-10 -139	NA	310	1,364	47
June	832	676		NA	190	1,310	51
July	771	682	28	NA	219	1,317	50
August	706	705	-58	NA	90	1,306	52
September	815	690	115	NA	165	1,362	
October	799		-47	NA	134	1,324	48 50
November*	R 848	634 D 777	-56	NA	153	1,224	50
December**	886	R 777	R -101	NA	167	R 1,358	51 5.54
AVERAGE	846	<i>570</i> 683	77	NA	NA.	1,389	R 54 <i>48</i>
· · · · · · · · · · · · · · · · · · ·	970	5.KG	44	NA	, .	1.005	aн

Stocks are totals as of end of period.

A negative number indicates an increase in stocks and a positive number indicates a decrease. Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

* See Explanatory Note 9.4.

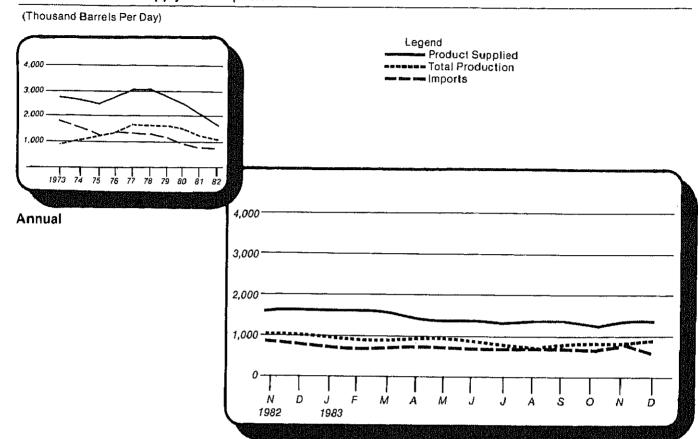
** Italics denote preliminary data. See Explanatory Note 8.

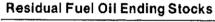
F = Revised data. NA = Not available. (*) = Less than 500 barrels per day. Note: Geographic coverage is the 50 States and the District of Columbia.

Totals may not equal sum of components due to independent rounding.

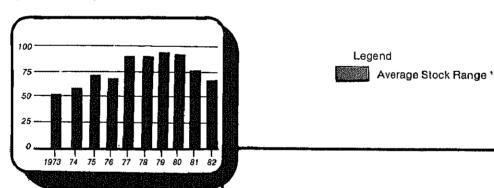
Sources: See the last page of this section.

Residual Fuel Oil Supply and Disposition

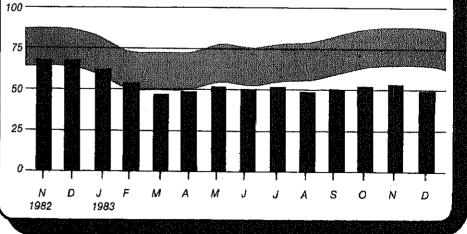




(Million Barrels)



1 Level and width of Average Stock Range for residual fuel oil based on 3 years of data, July 80-June 83. See Explanatory Note 6.

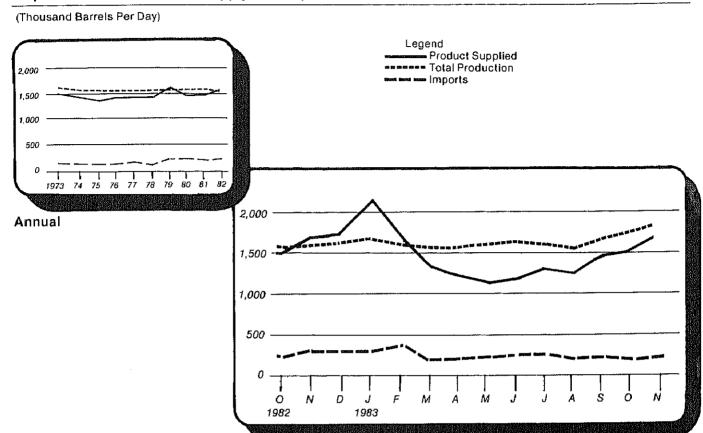


Monthly

Monthly

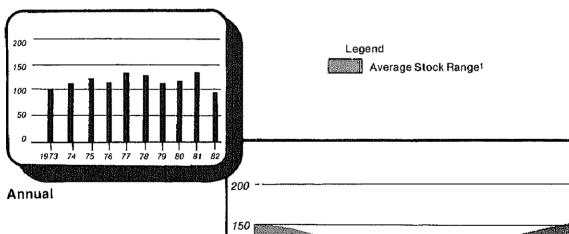
		Supply				Ending Stocks ¹		
		Total Production	Imports	Stock Withdrawai ²	Refinery Inputs	Exports	Products Supplied	
			·	Thousand Bar	rels per Day	· · · · · · · · · · · · · · · · · · ·		Million Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	
1974	AVERAGE	1,565	123	-38	220	25	1,406	99
1975	AVERAGE	1,527	112	³ -3 5	246	26		³ 113
1976	AVERAGE	1,535	130	24	260	25	1,333	125
1977	AVERAGE	1,566	161	-55	233	18	1,404	116
1978	AVERAGE	1,537	123	12	239	20	1,422	136
1979	AVERAGE	1,556	217	70	236	15	1,413	132
1980	AVERAGE	1,535	216	-27	233	21	1,592	111
1004	1			_,	200	21	1,469	³ 120
1981 .	January	1,617	306	³ 363	352	21	1.010	
	ebruary	1,593	327	173	303	21	1,913	117
	March	1,551	260	-4	257	20	1,769	112
	\pril	1,586	214	-236	231		1,530	112
	/lay	1,587	189	-258	220	26	1,308	119
	une	1,567	206	-208		19	1,279	127
J	uly	1,507	213	-258	237	24	1,304	133
A	ugust	1,592	195	-242	215	17	1,229	141
S	eptember	1,622	199		235	149	1,160	149
C	ctober	1,593	287	-75	287	21	1,438	151
N	lovember	1,571	280	72	320	76	1,556	149
	ecember	1,468		86	383	58	1,495	146
	AVERAGE	1,571	255	379	428	50	1,624	135
		1,011	244	-18	289	42	1,466	
982 J	anuary	1,565	314	443	391	67	4 000	
	ebruary	1,466	291	243	327		1,863	121
	arch	1,544	223	211	289	51	1,621	114
	prif	1,506	188	98	257	74	1,615	108
	ay	1,565	186	-71		77	1,458	105
	ine	1,515	192	-86	234	43	1,403	107
վե	ıly	1,476	227	-33 -13	262	106	1,254	109
Αι	ıgust	1,511	125	-13 -45	253	37	1,399	110
Se	eptember	1,538	247		254	61	1,276	111
Oc	tober	1,517	194	37	274	85	1,463	110
No	vember	1,542	267	97	306	81	1,421	107
De	cember	1,580	258	175	363	37	1,583	102
A	VERAGE	1,528	226	256	395	56	1,642	3 94
		.,020	220	111	300	65	1,499	- ·
83 Jai	nuary	1,662	240	³ 618			•	
	bruary	1,560	305		313	118	2,088	84
Ма	ırch	1,517		84	237	76	1,636	81
Apr	ril	1,531	166	-51	189	127	1,316	83
Ma	V	1,545	124	-107	198	116	1,232	86
Jur	•	1,593	167	-326	207	84	1,094	96
July			172	-333	205	59	1,169	106
	y gust	1,571	191	-206	217	55	1,284	
	otember	1,505	160	-183	229	29	1,225	112
	ober	1,625	178	-23	236	86		118
	ober /ember*	1,688	160	-61	268	32	1,457	119
		1,784	180	78	361	33	1,487	121
A.	VERAGE	1,598	185	-47	242	74	1,648 1,420	118

Stocks are totals as of end of period.
 A negative number indicates an increase in stocks and a positive number indicates a decrease.
 In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
 * See Explanatory Note 9.5.
 Note: Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components due to independent rounding. Sources: See the last page of this section.

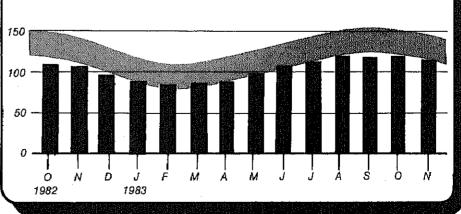




(Million Barrels)



¹ Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, July 80-June 83. See Explanatory Note 6.



Monthly

Monthly

		Supply			Disposition			Ending Stocks ²
		Total Production	Imports	Stock Withdrawal ³	Refinery Inputs	Exports	Products Supplied	
				Thousand Ba	rrels per Day			Million Barrels
1973	AVERAGE	3,693	502	•				
1974	AVERAGE	3,558	432	-9	750	166	3,270	208
1975	AVERAGE	3,424	277	-28	665	174	3,123	4 218
1976	AVERAGE	3,643	206	⁴ -2	537	160	3,002	219
1977	AVERAGE	3,912	205	~5	524	175	3,145	220
1978	AVERAGE	4,046	166	-27	514	165	3,410	230
1979	AVERAGE	4,153	195	14	492	167	3,568	225
1980	AVERAGE	3,956	210	~37	352	209	3,749	238
		-,	410	-23	311	198	3,634	4 247
1981	January	3,821	162	4 80				
	February	3,723	182		851	132	3,081	296
	March	3,722	230	-200	538	208	2,958	302
	April	3,711	230	-55	642	210	3,043	304
	May	3,892	229	24	733	192	3,040	303
	June	3,925	218	-58	594	238	3,231	305
	July	3,852	149	-29	656	197	3,261	306
	August	3,876	276	284	791	212	3,282	297
;	September	3,718	285	-33	676	219	3,225	298
	October	3,503	241	215	883	176	3,159	291
1	November	3,579	262	193	710	227	3,000	285
1	December	3,543	243	33	784	154	2,935	284
	AVERAGE	3,739	243 226	71	805	223	2,829	282
		0,700	420	46	723	199	3,088	
1982 .	January	3,171	269	-			•	
F	February	3,403	305	-7 450	624	180	2,631	282
	March	3,466	243	-153	663	138	2,755	287
A	April	3,408	309	-191	725	161	2,631	293
N.	⁄iay	3,317	318	73	796	204	2,790	290
J	lune	3,547	315	184	824	210	2,785	285
J	luly	3,660	408	123	812	216	2,954	281
	lugust	3,583	408 346	-1	856	187	3,023	281
S	September	3,533		217	743	202	3,201	274
	ctober	3,529	375	105	749	213	3,051	271
N	lovember	3,498	383	244	915	266	2,976	264
D	ecember	3,324	423	-28	837	269	2,786	264
	AVERAGE	3,453	313	366	885	275	2,842	4 253
		0,700	334	80	787	211	2,869	200
1 98 3 Ja	anuary	3,222	007	4			_,,	
Fe	ebruary	3,270	297	4 -371	570	271	2,307	271
	arch	3,400	287	-1	680	232	2,645	271
	pril	3,363	298	-94	570	249	2,786	273
	ay	3,448	377	3	596	247	2,901	273
	ine	3,674	364	26	694	242	2,902	273
Ju			427	99	715	292	3,197	
	.gust	3,703 3,774	393	106	757	209	3,237	270
	ptember	3,774	435	23	689	242	3,302	266
	stoper	3,861	460	-31	768	236	3,302	266
	vember*	3,579	427	-124	701	195		267
	VERAGE	3,560	442	101	912	238	2,985 2,955	270
	TYLNAUE	3,534	383	- 25	695	_00	4.805	267

Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.
 Stocks are totals as of end of period.
 A negative number indicates an increase in stocks and a positive number indicates a decrease.
 In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
 See Explanatory Note 9.6.
 Note: Geographic coverage is the 50 States and the District of Columbia.
 Totals may not equal sum of components due to independent rounding.
 Sources: See the last page of this section.

Sources

- 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."
- 2. 1977 through 1980: Energy Information Administration (EIA), Energy Data Reports, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual," and unleaded gasoline data from Monthly Petroleum Statistics Report.
- 3. January 1981 through December 1982: EIA, Petroleum Supply Annual.
- January 1983 through November 1983: Detailed statistics in appropriate issues
 of the Petroleum Supply Monthly. (see Explanatory Notes 9.1 through 9.6).
- 5. December 1983: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).
- January 1983 through December 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).



Detailed **Statistics**

Table 1. U.S. Petroleum Balance, November 1983

}	<u>Curren</u>	t Month	Year-t	o-date
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barre per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 51,387	1,713	F 670 700	4.745
(2) Lower 48 States	E 207,321	6,911	E 572,723	1,715
(3) Total U.S.	E 258,708	· ·	E 2,319,672	6,945
Net Imports	~ 230,700	8,624	E 2,892,395	8,660
(4) Imports (Gross Excluding SPR)	94,237	0.444	4 000 400	
(5) SPR Imports	5,115	3,141	1,026,468	3,073
(6) Exports	5,567	171	79,310	237
(7) Imports (Net Including SPR)	93,785	186	57,011	171
Other Sources	55,765	3,126	1,048,768	3,140
(8) SPR Withdrawal (+) or Addition (-)	-4.051	105	77.404	
(9) Other Stock Withdrawal (+) or Addition (-)	• •	-135	-77,464	-232
10) Product Supplied and Losses	9,500	317	8,561	26
11) Unaccounted for 1	-1,977	-66	-22,062	-66
12) Total Other Sources	4,112	137	62,218	186
12) Crude Input to Defination	7,584	253	-28,747	-86
13) Crude Input to Refineries	360,077	12,003	3,912,416	11,714
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
14) Field Production	49,088	1,636	523,178	1,566
15) Imports 2	432	14	4,846	14
16) Stock Withdrawal (+) or Addition (-) 2	1,775	59	-5,269	-16
17) Total NGPL Supply	51,295	1,710	• • • •	
Other Liquids	31,200	1,710	522,555	1,565
Unfinished Oils and Gasoline Blending Components, Total				
(a) Stock Withdrawal (+) or Addition (-)	3,850	100	4 004	_
19) Imports	•	128	-1,651	-5
20) Other Hydrocarbons and Alcohol New Supply (Field Production)	9,226	308	87,987	263
21) Refinery Processing Gain 1	1,492	50	17,853	53
22) Crude Oil Product Supplied	16,360	545	161,670	484
23) Total Other Liquids	1,929	64	21,568	65
*	32,857	1,095	287,427	861
(23) = (18) through (22)				
24) Total Production of Products 3	444,229	14,808	4,722,398	14,139
Net Imports of Refined Products 3 25) Imports (Gross)				
26) Exports	46,036	1,535	467,788	1,401
	14,812	494	193,040	578
(Net)	31,224	1,041	274,748	823
8) Total New Supply of Products	475,454	15 0 40	1.007.140	4 4 9 9 9
(28) = (24) + (27)	470,404	15,848	4,997,146	14,962
19) Refined Products Stock Withdrawal (+) or Addition (-) 3	-9,469	010	A7 667	
	-5,408	-316	27,567	83
(0) Total Petroleum Products Supplied for Domestic Use	465,985	15,533	5,024,713	15,044
(30) = (28) + (29)				
1) Finished Motor Gasoline	198,862	e enn	0.000.454	
2) Distillate Fuel Oil	86,371	6,629	2,203,151	6,596
3) Residual Fuel Oil	•	2,879	874,871	2,619
4) Liquefied Petroleum Gases	40,731	1,358	463,502	1,388
5) Other4	49,444	1,648	474,326	1,420
6) Crude Oil	88,648	2,955	987,295	2,956
7) Total Product Supplied	1,929	64	21,568	65
(37) = (31) through (36)	465,985	15,533	5,024,713	15,044
Ending Stocks, All Oils Crude Oil and Lease Condensate (Excluding SPR)	241 400		014.4==	
9) Strategic Petroleum Reserve (SPR)	341,483		341,483	
0) Unlinished Oils	371,291		371,291	
	108,994		108,994	***
	40,479		40,479	***
2) Natural Gasoline and Unfractionaled Stream2	16,737		16,737	
3) Finished Refined Products 3	631,289		631,289	
4) Total Stocks	1,510,273		1,510,273	-
			• • •	

Note: Totals may not equal sum of components due to independent rounding. Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

¹ A balancing item.
2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.
3 For products included see Explanatory Note 9.7.
4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefled petroleum gases.

E = Estimated.

Not Applicable

⁻⁻ Not Applicable.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, November 1983 (Thousand Barrels)

			Supply							:
				Stool				Disposition		
Commodity	Field Produc- tion	Refinery Produc- tion	Imports	Stock With- drawal (+) or Addi-	Unac- counted For Crude	Crude	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	900 1	'		(-) uou	5					
Harrist (DIPPED DO	90/'967 - '	0	99,352	5,449	4,112	48	360,077	5,567	1,929	712.774
Natural Gas Liquids and LRGs	48,773	10,361	5,830	4,120	c	c	***	. ;		
Infractionated Control		0	240	287	•	> 0	867,71	086	50,346	135,136
Plant Condenses		0	0	1.563) C) c)26'c	5 (-06	6,118
ignoral Detrology Compa		0	193	-555	o c	o c	2 0	o •	0	10,112
Ethane	43,164	10,361	5,398	2,345	o c	0 0	700	0 60	C4 :	507
Propage	8,659	711	1,690	470		-	100	265	49,444	118,399
Bulane	15,381	8,413	1,250	1,046	0	o c	100	(8)	905,01	7,605
Butane-Propage Mixtures	6,542	1,082	1,595	3,286	0	· c	6 827	- 6	70,4 IO	815,09
Ethane-Propane Mixtures	147	88	292	8	0	0	92,092	67 1	0,449 946	23,223
Sobitane	9,200	0	571	-1,908	0	c	-	o c	1 6	00.4
	3,229	. 67	0	310	0	0	3.547	> C	900',	14,754
Other Liquids	1 403	•	•					•	3	10.0
Other Hydrocarbons and Alcohol	1,432	-	9,226	3,850	0	0	20,446	0	-5.878	149 473
Unfinished Oils	20 C	5 6	0 ;	101	0	0	1,593	0	c	282
Motor Gasoline Blending Components	0	.	7,689	3,126	0	0	14,179		3 36.4	202 408 904
Aviation Casoline Blooding Components	> '	0	1,537	587	0	C	4 63B	• <	200	200,000
casomic perionily confibrilleris	0	0	0	36	0	0	98	0 0	410,2	016,88 100
Finished Petroleum Products		;				,	}	•	>	/87
Finished Motor Gasoline	315	404,280	40,639	-11,814	0	0	0	13.832	419 588	512 800
Finished Leaded Motor Gasoline	3 3	199,014	8,063	-8,209	0	0	0	99	108 862	100,000
Finished Unleaded Motor Gasoline	4 ,	86,262	3,820	-2,628	0	0	0	9 6	87.430	96,036
Finished Aviation Gasoline	£ 5	112,752	4,243	-5,581	0	0	0	3 0	111 433	90,400
Naphtha-Type Jet Fuel	5	604	-	સ	0	0	0	o	740	34,00
Kerosene-Type Jet Fuel	> c	6,095	0	-518	0	0	0	• •	5.577	6,470
Kerosene	5 6	26,190	550	-1,978	0	0	0	373	24.389	30,246
Distillate Fuel Oil	n c	3,807	/23	-12	0	0	0	2	4.579	10.219
Residual Fuel Oil	> c	0/5,00	5003	1,946	0	0	٥	1,614	86.371	161 339
Naphtha < 400 Deg. for Petro, Feed. Use	o c	40400	718,62	-3,042	0	0	0	4,998	40,731	54.462
Other Oils > 400 Deg. for Petro, Feed, Use	0 0	0,000	770	52	0	0	0	175	4,452	1,797
Special Naphthas	ş	208,1	2	-78	0	0	0	516	7,358	2004
Lubricants	3 0	,, a	402,1	405	0	0	0	54	3,468	3,079
Waxes	o c	70.7	202	-849	0	0	0	405	4.118	11.485
Petroleum Coke	o c	2000	્રુ (÷.	0	0	0	24	463	790
Asphalt and Road Oil	O C	0,7,0	>	\$ 1	0	0	0	5,556	8.203	5.506
Still Gas	0 0	3,03,7	₹ °	260	0	0	0	14	10,489	15 758
Miscellaneous Products	, gr	0.000	0 0	0 0	0 (0	0	0	17,535	0
	}	203	201	-210	5	0	0	88	2,253	2,117
) otal	309,288	414,641	155,047	1,605	4.112	48	398 284	90 376	100 001	6 6 6 1
			ĺ		•			5	200,000	1,510,273

Unaccounted for crude oil is a balancing item.
 (s) Less than 500 barrels.
 E = Estimated.
 Note: Total may not equal sum of components due to independent rounding.
 Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - November 1983 (Thousand Barrels)

			Supply					Constitution		
				Charle				Uisposition		
Commodity	Field Produc-	Refinery Produc-	Imports	With- drawal (+) or	Unac- counted	Crude	Refinery	\$ 0	Products	Ending
	tion	tion	•	Addi- tion (-)	For Crude Oil1	Losses	Inputs	S DOTY	Supplied	Stocks
Crude Oil (including lease condensate)	. E 2,892,395	0	1,105,778	-68,903	62,218	494	3,912,416	57,011	21,568	712.774
Natural Gas Liquids and LRGs	519,165	109.325	66.400	-20 95n	c	ć	6			
Natural Gasoline and Isopentane	81,363	0	2,359	-131	.	•	64,373	24,730	496,835	135,136
Unfractionated Stream	6,242	· C	ì	6708	.	.	51,104	•	22,487	6,118
Plant Condensate	7007	, c	900.0	200	-	O 1	9	0	0	10,112
Liquefied Petroleum Gases	150,1	100 001	7,788	335	0	0	10,298	0	22	507
Fibabe	424,403	C24,801	40,10	-15,681	0	0	80,804	24,730	474,326	118,399
Docon	00,283	5,452	15,131	-1,634	0	0	870	33	104 334	7 605
	149,100	89,601	14,161	-2,281	0	0	1,393	14.735	234 453	60.418
	68,498	12,768	15,439	6,541	0	0	46.992	9 964	33 207	2000
butane-Propane Mixtures	1,787	1,215	5,709	367	0	0	2,653		107'00 E A9E	4 750
Ethane-Propane Mixtures	87,340	0	11,313	-3,472	0	0	48		04.40	1,736
Isobutane	31,453	583	0	-2,120	0	0	28,848	0	774	10.541
Other Liquids	47 050	•	100	į						<u>.</u>
Other Hydrocarbone and Machal	1,635	> <	186,18	-1,651	0	0	160,624	0	-56,435	149,473
Hofinished Oile	CR'/L	0 1	o :	53	0	0	17,882	0	0	282
		0	76,964	-3,717	0	0	101,691	C	-28 A44	108 901
Auction Gasoline Diending Components	0	0	11,022	1,832	0	0	40,363	• •	-27.509	30 010
water casonine diending components		0	τ-	205	0	0	988	•	200	50'50 F0C
						•	}	>	201	/07
Finished Petroleum Products	4,013	4,277,760	406,034	43,248	•	-	c	160 210	A 500 740	000
Finished Motor Gasoline	727	2,114,725	84,166	6.501	· C		•	010,001	4,202,140	512,890
Finished Leaded Motor Gasoline	493	948,075	44.040	5.755	· c	· c	•	2,300	2,203,131	196,036
Finished Unleaded Motor Gasoline	234	1.166.650	40 126	746		> c	9	2,308	385,385	96,400
Finished Aviation Gasoline	1 125	7 492	910	ę	0 0	>	.	5	1,207,756	99,636
Naphtha-Type Jet Fuel		58 363	<u> </u>	130	-	o (0	0	8,734	2,410
Kerosene-Type Jet Fuel	•	224 700	9 0	, i	> 0	.	o .	201	68,709	6,642
Kerosene	. 6	200.25	601,6	-7,243 0-13	> (0	0	1,496	275,164	39,246
Ö	5 7	04.7 909	830,0 000,0	5/6	> (Ö	0	294	39,350	10,219
Besidial Fire Oil	=	007,100	conicc o	24,240	D	0	0	21,727	874,871	161,339
Naohtha < 400 Deg for Betro Essel Hea	-	117,182	486,152	13,767	0	0	0	63,126	463,502	54,462
Other Oils / 400 Dea for Detro Cood 1100	> 0	D/0,04	4,337	0/1	0	0	0	1,666	49,720	1,797
Special Nantitiae	0.00	/96'98 (0)	181	176	0	0	0	4,962	82,362	2,004
1 ubricanto	600°	5/2/3	7,520	332	0	0	0	1,003	26,654	3.079
Massas	0	49,059	2,648	1,696	0	0	0	5,289	48,114	11.485
Details - Anti-	0	5,034	273	4	0	0	0	255	5.048	062
	0	139,688	0	1,215	0	0	0	64 729	76 174	5 506
Asphalt and Hoad Oil	0	128,224	2,414	1,511	0	٥	0	255	131 894	45,758
Cell Gas	٥	184,127	0	0	0	0	0	9	184 127	9
Miscellaneous Products	1,043	19,265	5,400	-198	0	0	0	339	25,171	2,117
Total	007								•	İ
777777777777777777777777777777777777777	3,433,426	4,387,085	1,666,200	-48,256	62,218	494	4,225,415	250,051	5,024,713	1,510,273
1 Unaccounted for colds oil is a balanciac item										

Unaccounted for crude oil is a balancing item.
 Less than 500 barrels.
 E = Estimated.
 Note: Total may not equal sum of components due to independent rounding.
 Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, November 1983 (Thousand Barrels per Day)

			Supply				å		
Commodity	Field	Refinery		Stock With-	Unac-	opin.	uolisodsin	Silion	
	tion	tion	strodus	drawal (+) or Addi- tion (-)	For Crude	Losses	Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,624	0	3,312	182	137	N	12,003	187	
Natural Gas Liquids and LRGs	1626	345	Ş			!	2	9	\$
Natural Gasoline and Isopentane	116	3	44	137	0	0	592	33	1.678
Unfractionated Stream	5.3	> c	10	o ;	0	0	198	0	8
Plant Condensate	7 0)	0	25	0	o	0		3 =
Liquefied Petroleum Gases	8 9	0	Ф	?	0	0	e e e	· c	Ø
Ethane	1,439	342	180	78	0	0	361	ģ	(-)
Process	289	54	26	-16	0		, ("	3	96.
Difference	513	280	42	35	0	o c) <		000
	218	36	53	110		· c	t occ	٠;	847
outsine-Propane Mixtures	ιn	ෆ	10	· en	• •	,	770	7 (175
Eulane-Propane Mixtures	307	0	10	† 4	• •	> c	n c	۰ د	12
Isobutane	108	8	0	; ⊊	o c	> c	-	٥ ،	262
			•	2	0	5	BL	0	2
Other Light Training	20	0	308	128	c	-	687	c	•
Cure rydiodarbons and Alcohol	20	0	0	ო		· c	2 62	> (961-
Motor Contract of the Contract	0	0	526	104			3 5	5 6	9
Motor Gasoline Blending Components	0	0	51	20	. 0	o c		> c	211-
manon describe prending components	0	0	0	-	0	0	} -	0 0	ļ
Finished Petroleum Products	7						•	o	•
Finished Motor Gasoline	= '	13,476	1,355	-394	0	0	0	461	13.986
Finished Leaded Motor Gasoline	N T	6,634	569	-274	0	0	0	N	6,629
Finished Unleaded Motor Sacolina	- ,	2,8/5	127	88	0	0	0	N	2.914
Finished Aviation Gasolina	- 0	3,758	141	-186	0	0	0	0	3.714
Naphtha-Type Jet Fuel		8 8	<u>(</u>	- - !	0	0	0	٥	25
Kerosene-Type Jet Fuel	,	500	- (-17	0	0	0	٥	186
Kerosene) (5)	6/3 130	8 2	99	0	0	0	12	813
Distillate Fuel Oil		07.9.0	7 5	<u>.</u>	D	0	0	(s)	153
Residual Fuel Oil	o c	6/0/3	193 193	සි දි	0	0	0	75	2,879
Naphtha < 400 Deg. for Petro. Feed Use) C	Ç Ç	2 6	5	5 (0	0	167	1,358
Other Oils > 400 Deg. for Petro. Feed 11se	• •	200	- ·	4 (0	0	0	9	148
Special Naphthas	9 (1	3 2	- (? :	o	0	0	17	245
Lubricants	,	8 5	7 1	7 1	0	0	0	8	116
Waxes	-	Z (<u>,</u>	-58	0	0	0	13	137
Petroleum Coke	-	- [1 — (7	0	0	0		15
Asphalt and Road Oil	> c	45. 700	,	- ;	0	0	0	185	273
Still Gas	o c	055 207	- (8 '	0	0	0	(s)	350
Miscellaneous Products	, c	2 4	- (၁ I	0	0	0	0	585
	v	0	٥	7	0	0	O	-	75
Total	10,310	13,821	5,168	54	137	8	13 276	679	45 533
							Ļ	, ;	2226

Unaccounted for crude oil is a balancing item.
 Less than 500 barrels.
 E = Estimated.
 Note: Total may not equal sum of components due to independent rounding.
 Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - November 1983 (Thousand Barrels per Day)

			Singi				Disposition	sition	
Commodity	Field Produc- tion	Refinery Produc- tion	Imports	Stock With- drawal (+) or Addi- tion (-)	Unac- counted For Crude Oit1	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,660	0	3,311	-206	186	Ψ-	11,714	171	59
	4 REA	297	199	¥	G	C	456	74	1.488
Notice Cas Liquids and Lines	244	3	_	(S)	0	0	183	0	29
Matural Gasoline and Isopeniane	ţ ?	o C		-18		0	·	0	0
Diant Condensate	7.	0	7	, co	0	0	3.	0	(8)
Lionatian Detroloum Gases	1.271	327	185	4	0	Ö	242	74	1,420
Fibon	528	16	45	ιγ	0	0	ო	<u>(s)</u>	312
Propane	446	268	45	<i>-</i> -	0	0	4	4	702
Butane	205	38	46	-50	0	0	141	93	66
	ις	4	47	•	0	0	60	0	6
Ethane-Propane Mixtures	261	0	34	-10	0	0	(8)	0	285
Isobutane	94	-	Q	φ	0	0	86	0	KI
Other Liquids	53	0	263	ų.	0	0	481	•	-169
Other Hydrocarbons and Alcohol	23	0	0	(8)	0	0	54	0	0
Unfinished Oils	0	0	230	Ŧ	.0	0	304	0	- 8
	0	0	33	ເດ	o	0	121	0	-82
Aviation Gasoline Blending Components	0	0	(s)		0	0	2	0	٦
Civiliand Defendation Deadlessee	7	12 808	1216	129	0	Q	0	504	13,661
Enished Mater Casolina	io	6.332	252	19	0	0	0	ത	6,596
Chicket Loaded Motor Copoline	ı -	2,839	132	1	6	0	0	თ	2,980
Finished Unleaded Motor Gasoline	•	3,493	120	, N	0	0	O	0	3,616
Finished Aviation Gasoline	ო	22	-	(s)	0	0	0	0	Se 50
Naphtha-Type Jet Fuel	0	205	0	8 3	0	0	Φ.	-	206
Kerosene-Type Jet Fuel	<u>@</u>	823	22	22-	0	0	0	₹ .	824
Kerosene	<u>©</u>	108	ത	0	0	0	ο ί	y (118
Distillate Fuel Oil		2,447	165	ن	0 (0 (00	ខ្លួ	2,619
Residual Fuel Oil	0	842	693	4.	၁	5 6	- (2 4 2	000,
Naphtha < 400 Deg. for Petro. Feed. Use	0	140	<u>.</u>	,	0 (o (> 0	n <u>.</u>	n t
Other Oils > 400 Deg. for Petro. Feed. Use	0	260	- !	-	5 (> (> 0	פיי	4. g
Special Naphthas	က	20.	8	— 1)	5 (> <	> 4	3 5
Lubricants	0	147	ಹ	ι ດ	9 (5 (> c	₽ •	4 4
Waxes	0	ξ.	-	<u>(S</u>	0	ο .	.	, ;	2 6
Petroleum Coke	0	418	0	₹ 1	0 (0	0 0	194	222
Asphalt and Road Oil	0	384	7	ın ı	0 (۵,	- •	- c	000
Still Gas	0	551	0	ο.	۰ (0 (0 6	> •	- CC
	en	28	9	7	-	Þ	•	-	6
Total	10,280	13,135	4,989	-144	186	-	12,651	749	15,044

Unaccounted for crude oil is a balancing item.
 Less than 500 barrels.
 Estimated.
 Note: Total may not equal sum of components due to independent rounding.
 Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, November 1983 (Thousand Barrels)

-		Ending Stocks		14,233	5,813			19,073	14.436	4.579		Þ			27,388		449	641	10,969	4,537	70,839	29,338	ST !	99/	3,339	159	1,162	4,286	0 ;	
		Products Supplied		•	5,359	4,975	3	006,1-	-1837	φ	; =)	141,657	67,205	25,963	41,242	204	1,275	9,063	1,460	056,15	21,643	4 4	- 1	147	92.	4 6	5,133	1,647	ì
	Disposition	Exports		0	25	ς, ο	•	> C	0	0	0		376	2	N G	o 1	0	0 ;	2	<u>.</u>	- 3	(e)	3 6	191	† *	4 C	5 1	~ 0	⊃ <u>ƙ</u>	•
	Disp	Refinery Inputs		27,217	487	345 142	5 101	92	5,181	826	12	•	- (-	> <	-	0 (> 0	>	> c	o c	o c	.	o c	o c	.) C	o c	- C	
		Crude		>	0	00	c	0	0	0	0	•	5 c	o c	o c	o c	> c	> c	> c	o c) C	0	0	0		0	0	c	, 0	
		Net Receipts	2 606	2004	2,732	, 0	5	0	-159	108	0	75 266	44 997	15,604	29,390	100	- 92 878	0 000	523	16.130	1.863	83	327	742	0	0	264	0	200	
		Unac- counted For Crude Oil1	664	}	© C	0	0	0	0	٥ (.	c	• •	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Add	Stock With- drawal (+) or Addi- tion (-)	1.037		353	7	1,432	29	1,278	v 5	4	-3,181	-1,880	1,079	-2,959	0	-36	-910	-349	3,775	-4,042	-55	11	-456	0	-70	833	0	86-	
	Supply	Imports	21,995	. !	857 576	281	2,805	0 0	5,423 1074	n c	>	35,534	7,416	3,436	3,980		0	410	723	4,871	20,946	249	154	156	1 2	0	9	0	₹#	
		Refinery Produc- tion	•	•	1,036	0	0	-	-	0	,	34,361	16,624	5,812	10,812	5	633	453	463	7,155	2,876	50E	8	828	26.	1,020	2,027	¥.	185	
		Field Produc- tion	E 2,244	803	646 646	247	£ ;	פַ כ	0	0		53	23	34	<u>.</u>	Э,	0	0	0	0 (> 0	o c	> c	.	> 0	> c	> <	> c	>	
	-1	Commodity	Crude Oil (including lease condensate)	Natural Gas Liquids and LRGs	Liquefied Petroleum Gases		Other Liquids Other Hydrocarbons and Alcahol	Unfinished Oils	Motor Gasoline Blending Components	Awaron Gasoline Blending Components		Finished Motor Gasoline	Finished Leaded Motor Casolino	Finished Unleaded Motor Gasolino	Finished Aviation Gasoline	Naphtha-Type Jet Fluci	Kerosene-Type Jet Firet	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Naphtha and Other Oils for Petro. Feed	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Still Gas	Miscellaneous Products	***************************************	-1-1

Table 7. PAD District II, Supply and Disposition of Crude Oil and Petroleum Products, November 1983 (Thousand Barrels)

			Su	Supply				Dispo	Disposition		
Commodity	Field Produc- tion	Refinery Produc- tion	Imports	Stock With- drawal (+) or Addi- tion (-)	Unac- counted For Crude Oil1	Net Receipts	Crude	Refinery	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 31,320	0	18,866	738	32,259	1,970	0	84,905	248	0	73,553
Natural Gas Liquids and LRGs	9,926	2,338	3,811	943	0	5,159	0	6,160	÷	16,006	42.091
Liquefied Petroleum Gases	10,038 -112	2,338	3,811	531 412	00	3,549	00	4,425	= =	15,831	36,809
			•	!	•		,	:	•	2	707'0
Other Liquids	378	0	261	132	0	1,260	0	2,389	0	-358	25,936
Under Hydrocarbons and Alcohol	378	00	0 5	17	0 0	0 0	0 0	395	٥ (0	119
Motor Gasoline Riending Components		0 0	212	5 6	.	7	> 0	0 60	> 0	805-	18,169
Aviation Gasoline Blending Components	0	0	g o	292	0	1 C	00	7,7		- c	, 90, 78
		' ;	,	i		•	•	3	>)	5
Finished Petroleum Products	۲,	94,629	799	-5,173	.	21,752	0	0	389	111,626	129,811
Finished Motor Gasquine	o •	53,893	29	-3,125	0	12,677	0	0	0	63,512	60,849
Finished Leaded Motor Gasoline	۰ ۵	25,558	5	-2,096	0	6,135	0	0	0	29,648	31,009
Finished Unleaded Motor Gasoline	0	28,335	5	-1,029	0	6,542	0	0	0	33,863	29,840
Finished Aviation Gasoline	0	112	0	4	0	115	0	0	0	185	601
Naphtha-Type Jet Fuel	0	923	0	90	0	142	0	0	0	1,155	1,663
Kerosene-Type Jet Fuel	0	4,015	0	-218	0	1,662	0	0	0	5,459	8,222
Nerosene	0 (802	0 (193	0	46	0	0	-	1,043	2,197
Desiding Flot Oil	-	20,277	252	-1,953	0 0	6,609	0	0 (- (25,184	42,724
Naohtha and Other Oils for Petro Feed	· c	2,033 886 886	, a	<u> </u>	0	200	0	o c	⊃ ų	2,233 929	0,035 0,035
Special Naphthas	0	495	88	1 22	0 0	197	· c	c	3 4	786	507
Lubricants	0	762	12	-95	0	282	0	0	20	626	2 076
Waxes	0	45	ო	***	0	0	0	0	·	48	76
Petroleum Coke	0	3,250	0	4	0	0	0	, o	318	2,973	626
Asphalt and Road Oil	0	3,413	ო	-281	0	273	0	٥	*1	3,403	6,085
Still Gas	0	3,515	0	0	0	0	0	0	0	3,515	0
Miscellaneous Products	7	163	3	F	0	72	0	0	8	293	225
Total	41,631	96,967	23,738	-3,360	32,259	30,141	0	93,454	648	127,274	271,391
The second secon								ļ			

Table 8. PAD District III, Supply and Disposition of Crude Oil and Petroleum Products, November 1983 (Thousand Barrels)

		,									
			ns.	Addres				Dispo	Disposition		
Соттодіту	Field Produc- tion	Refinery Produc- tion	Imports	Stock With- drawal (+) or Addi- tion (-)	Unac- counted For Crude Oil1	Net Receipts	Crude	Refinery	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	. E 124,098	0	52,401	3,550	-25,029	16,381	27	171.342		,	000
Natural Gas Liquids and LRGs	34,470	6,000 6,000	293	2,539	0 0	-6,477 -6,177	00	9,802 5,133	728 728	26,295 26,295 26,324	82,758 71,966
***************************************		5	0	1,355	0	-300	0	4,669	0	-29	10,792
Other Liquids	603	6 C	5,609	2,330	0	-1,209	0	11,957	0	-4,624	67,995
Unfinished Oils		0	5,189	2,233	- 0	150	0 0	619	00	0	10.5
Aviation Gasoline Blending Components	φ.	0	420	68	0	-1,359	0	2,703	0 0	13.553	48,8/3
Sillariodino frincia armona communication	0	0	0	٣	0	0	0	9	0	0	183
Finished Petroleum Products	245	194,294	2,982	-1,158	0	-100.073	G	c	5 901	000	7000
Chickon Casome	0	92,034	199	-2,106	0	-59,510	c	o c	56.0	500,50	132,261
Finished Linkoded Motor Country	0	37,880	199	-839	0	-22,676	0	0	2 6	14 503	25,130
Finished Aviation Gasoline	•	54,154	٥	-1,267	0	-36,834	0	0	; 0	16.053	25,896
Naphtha-Type Jet Fuel	<u> </u>	283	0 0	27 00	0 (-305	Q ·	0	0	190	829
Kerosene-Type Jet Fuel	0	14.674	57.	-543	o c	1 400	0 0	0	0 ;	1,182	2,349
Kerosene	ო	2,526	; 0	27	0	099-	.	-	907 5	2,492	12,847
Residual Fuel Oil	0 (38,303	257	830	0	-23,010	0	0	505	15.875	33,778
Naphtha and Other Oils for Petro. Feed	-	10,820	1,487	1,117	0 1	-1,742	o	0	2,324	9,358	12,452
Special Naphthas	06	1 171	360	2000	0 0	2 G	0 (φ.	531	9,931	2,765
Lubricants	0	3,179	42	-337	· c	200	-	9	٠ ئ	1,309	1,460
Waxes	0	294	i r	3 7	o c	† C	o 0	> (8/1	1,682	4,800
Petroleum Coke	0	5,896	0	-139	0	o c	.	-		238	503
Asphait and Road Oil	0	2,396	0	233	0	-537	0	0	(s)	2,730	-,648 5248
Missolbensons Dandacto	0	8,366	0	0	0	0	0	0	C C	386.8	ָ ֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֓֞
wiscellal redus Troducts	84	1,720	109	-141	0	-227	o	0	ξ.	1,494	1,245
Total	159,416	200,294	61,285	7,261	-25,029	-91,378	27	193,101	7.629	111.092	811 644
								•	<u>.</u>		

Table 9. PAD District IV, Supply and Disposition of Crude Oil and Petroleum Products, November 1983 (Thousand Barrels)

			Suf	Supply				Dispo	Disposition		
Commodity	Field Produc- tion	Refinery Produc- tion	Imports	Stock With- drawal (+) or Addi- tion (-)	Unac- counted For Crude Oil1	Net Receipts	Crude Losses	Refinery	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 16,245	0	1,257	-277	-4,112	0	0	13,106	0		13,166
Natural Gas Liquids and LRGsLiquefied Petroleum Gases	2,541 1,010	06 06	549 398 151	၈ ၈၀	0 00	-1,414 -104 -1,310	• • •	541 383 158	0 00	1,234 1,020 214	1,150 560 590
Other I mide	c	-	8	α T	c	c	c	466	,	490	4815
Other Hydrocarbons and Alcohol	0	0	,0	30	0 0	٥٥	0	0	0	0	0
Unfinished Oils	0	0	62	310	0	0	0	-185	0	557	2,845
Motor Gasoline Blending Components	0	0	0	-348	0	0	0	-281	0	-67	1,970
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	1	13,462	149	-1,084	0	222	0	0	2	12,757	10,520
Finished Motor Gasoline	^	6,796	45	-738	0	190	0	0	0	6,297	5,403
Finished Leaded Motor Gasoline	7	4,287	42	-540	0	-94	0	0	0	3,702	3,458
Finished Unleaded Motor Gasoline	0	2,509	-	-198	0	584	0	0	0	2,596	1,945
Finished Aviation Gasoline	0	28	0	7	0	0	0	0	0	30	58
Naphtha-Type Jet Fuel	0	385	0	53	0	-174	0	0	0	264	298
Kerosene-Type Jet Fuel	0	562	0	29	0 1	431	0	0	0	1,052	707
Kerosene	0 0	42	0 6	-12	0 0	0 10	0 (00	0 0	0 30	6,6
Districted First Oil		338	9,00	n er	> C	0 0	o 6	o c	o c	363	455
Naphtha and Other Oils for Petro. Feed.	0	-	Ô	ī	0	0	0	0	(S)	(s)	9
Special Naphthas	0	4	_	ማ	0	0	0	0	0	-	F
Lubricants	0	32	<u></u>	-12	0	0	0	0	-	22	65
Waxes	٥	2		0	0	0	0	0	0	7	0
Petroleum Coke	0	306	٥	10	0 (0	0 (0 (0	316	123
Asphalt and Road Oil	0 (, eg)	-248	-	-	5 (5	- (200	25,
Still Gas Miscellaneous Products	- ო	38 38	(s)	유	9 0	00	00	30	0	39 0	^
Total	18,796	13,552	2,016	-1,390	4,112	-1,192	0	13,181	8	14,487	29,651

Table 10. PAD District v, Supply and Disposition of Crude Oil and Petroleum Products, November 1983 (Thousand Barrels)

			ű	Supply	!						
•				Stock				Disp	Disposition		
Commodity	Field Produc- tion	Refinery Produc- tion	Imports	With- drawal (+) or	Unac- counted For Crude	Net Receipts	Crude	Refinery	Exports	Products	Ending Stocks
				Addi-	Ö	श्राती करता	Cosses	Inputs	2	Supplied	
Crude Oil (including lease condensate)	€ 84,801	0	4.834	403							
Natural Gas Liquids and LRGs			į	7	/60'1	-20,956	77	63,507	5,319	1,890	83,192
Uquefied Petroleum Gases	585 585 876	897 897	320 320	276 265	00	0 0	0 0	768	215	1,453	3,324
Other Liquids		5	0	Ξ	0	0	00	210	4. 0	1,294 159	3,289 35
Other Hydrocarbons and Alcohol	496 496	• 0	489	φ.	0 (0	0	465	0	214	34654
Motor Gasoline Blending Components	0 (0	· -	-811	00	0 0	0 (497	0	0	4,74
Aviation Gasoline Blending Components	3 6	00	488	798	0	0	-	118	o c	-654	24,671
Finished Petrole:m Products	•	•	>	œ	0	0	0	9	•	901.	6,959
Finished Motor Gasoline	0	67,534	1,175	-1,218	0	2.833	•	•		•	}
Finished Leaded Motor Gasoline	> c	29,667	338	-360	0	1,649) 0	-	6,165 2	64,160	54,308
Finished Unleaded Motor Gasoline	0	16.942	248	-232	0 (1,031	0	0	n m	13,231	19,654
Nachtha-Tyne Let Evel	0	89	0	63	-	618 2	0	0	0	17,678	10.363
Kerosene-Type Jet Fuel	0	1,464	0	3 4	•	ህ አጸና	0 0	0	0	131	473
Kerosene	0 (6,486	8	-366	0	165	> (0 (o į	1,701	1,691
Distillate Fuel Oil	-	9	0	129	0	0	o c	5 C	φ ,	6,324	6,501
Residual Fuel Oil	oc	0,374	205	-517	0	496	0	0	108	55.0	352
Naprima and Other Oils for Petro. Feed,	0	819	80	-298 -178	00	211	0	0	2,674	7,074	8.582
Lubricants	0	27	12	45	oc) c	0 (0	63	578	707
Waxes	0 (363	21	23	o Q	, 5	- c	0 0	CV	181	245
Petroleum Coke	0	9	8	-	0	0	o c	-	<i>;</i>	328	1,205
Asphalt and Road Oil	> C	3,243	0	202	0	0	0) C	4 60	5 8	52
Still Gas	> C	5,418	, . (55	0	0	0	o c	, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10	F 6	1,947
Miscellaneous Products	,	163	۰ ۵	ပ မွ	0 0	0 !	0	, 0	- 0	3,491	1,519
Total		:	J	3	5	4	0	0	4	152	509
***************************************	85,240	68,431	6,818	-547	1,657	-18,123	21	64.740	11 600	170	!
1 Unaccounted for crude oil is a balancing item								2	050,1	710,80	172,478

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Currently Available Month, 1 September 1983 (Thousand Barrels)

	-		
	Produ	Production	
PAD District and State	Total	Daily	PAD District and State
PAD District I		T.	. Law.
Florida	1.561	52	PAD District IV
New York	E 68	2	Colorado
Pennsylvania	E 352	E 12	Montana
Vicainia		l c	Tet.
West Virginia	223) ;	Minorion
A.director of S	200	_ '	WYCHIRI LA
Automotive and a second a second and a second a second and a second a second and a second and a second and a	44		Adjustment 2
Total PAD District I	E 2,352	E 78	Total PAD District IV
PAD District II			PAD District V
Illinois	2,460	82	Alaska
Indiana	408	7	South Alaska
Kansas	5 967	199	Morth Stone
Kootucki	247	8	
NGIRUCKY	1	7 .	Adjustment for Alaska?
Michigan	E 2,662	E 89	Total Alaska
Missouri	E 17	m t-	Arizona
Nebraska	533	α	
Noth Doboto	100	2 6	
MOIL DANGE	4	65	Central Coastal
Chio ammunitariamina di Chio	E 1,197	E 40	East Central
Oklahoma	13.049	435	Noth
South Dakota	100		£ S
- February	3) (Oddul
lennessee	28	m	Total California
Adjustment 2	184	9	Nevada
Total PAD District II	E 31.467	E 1.049	Adjustment for Anzona California and Nevada2
			Total DAD District V
PAD District III			
Alahama	1 425	70	Heites States Total
Adjustant) (i	} {	Cliffed States Loted
Albada mummummummummummummummummummummummummum	940° I	70 =	
Louisiana			 includes the following offshore production (thou
Gulf Coast	37,913	1,264	Alaska: 2,001;
Rest of State	2810	76	California Federal, 2 486 State, 3 140-
Total I ouiciana	40,720	1 267	Company Codorol 35 950 Ctato 3 140-
Literature and the contract of	40,723	100,1	Louisialia: reueral 23,000, State 2,143,
Mississippi	2,507	/9	exas: rederal- 1,593, State- 217;
New Mexico			U.S. Total- 37,446,
Northwestern	536	8,	2. These adjustments are used to reconcile the m
Southeastern	5,603	190	
Total Nov. Months	200	3 6	
T-	677'0	800	U.S. arid Alaskari ilgules shown in the Summia
exas			of this issue and with the PADU level rigures p
TARC District 01	1,999	29	previous issue. Final data at the State, PAD I
TRRC District 02	3.321	111	national levels will be published without adjust
TRRC District 03	10.282	343	Petroleum Sunoly Annual.
Topic of	2.264	3,4	Note: Total may not came of components du
	707	2 8	Note: Total may not equal such of compositions of
	1010	8 ;	
I HAC District Up, excitoting East Lexas	3,496	/11	r =Estimatéo.
THRC District 07B	2,795	86	 Data not available.
TRRC District 07C	2.824	26	
TRRC District 08	18.829	628	
TRRC District 08A	18.415	614	
TRRO District Do	3171	<u> </u>	
TOO Dietrict to	1 20%	3 6	
1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	5.7	, i	
East 1 exas	4,168	139	
Total Texas	74,056	2,469	
Adjustment 2	-2,144	-7-	
Total PAD District III	E 124 455	E 4.148	

-Continued

84 77 E 79 E 310 3 E 553

83 E 16,599

2,528 2,324 E 2,367 E 9,297

Daily Average

Total

Production

67 1,670 -15 1,722

2,015 50,111 -463 51,663 20

E 205 E 696 E 1 E 217 1,119 2 -7

E 6,145 E 20,891 E 15 E 6,510 33,561

-214 85,101 E 259,974

E 8,666

Includes the following orisince production (Incusands of barrels): Alaska: 2,001; California: Federal- 2,486, State- 3,140; Culisiana: Federal- 2,860, State- 2,149; Texas: Federal- 1,593, State- 217; U.S. Total- 37,446. 2 These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the independently estimated U.S. and Alaskan figures shown in the State, PAD District and previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	
California: Federat- 2,486, State- 3,140; Louisianz: Federat- 25,860, State- 2,149; Texas: Federat- 1,593, State- 217; U.S. Total- 37,446, 2 These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroteum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	 includes the following offshore production (Inclusands of barrels): Alaska: 2,001;
Louisiana: Federal- 25,860, State- 2,149; Texas: Federal- 1,593, State- 217. U.S. Total- 37,446. 2 These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures sivom in the Sumary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Perforem Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	California: Federal- 2,486, State- 3,140;
Texas: Federal 1,593, State 217. U.S. Total 37,446. These adjustments are used to reconcile the national and PADD These adjustments are used to reconcile the national and PADD These adjustments are used to reconcile the national extinated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	Louisiana: Federal- 25,860, State- 2,149;
U.S. Total—37,446. These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	Texas: Federal 1,593, State- 217;
2 These adjustments are used to reconcile the national and PADD levels sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	U.S. Total- 37,446,
level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	2 These adjustments are used to reconcile the national and PADD
U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	level sums of the State data with the independently estimated
of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	U.S. and Alaskan figures shown in the Summary Statistics portion
previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Perfoleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	of this issue and with the PADD level figures published in a
national levels will be published without adjustments in the Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.	previous issue. Final data at the State, PAD District and
Petroleum Supply Annual. Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation. E = Estimated.	national levels will be published without adjustments in the
Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation, E = Estimated.	Petroleum Supply Annual,
Sources: See Explanatory Notes on Data Collection and Estimation, $\mathbf{E} = \mathbf{E}\mathbf{s}$ timated.	Note: Total may not equal sum of components due to independent rounding.
E =Estimated.	Sources: See Explanatory Notes on Data Collection and Estimation.
	E ⇒Estimated.
 Data not available. 	 Data not available.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District, 1 November 1983 (Thousand Barrels)

	PAD Dietrica	_						ì							
Commodity East Coast	Appala- chian Total	Appala al chian	Ind.	Minn. Wisc.	Okla. Kans.	Total	Texas	Texas	PAD District La. No.	≡ ⊴	<u> </u>		PAD Dist. IV	—	United
Natural Gasoline and Isopentane 55 Unfractionated Stream 529 Ethane Propane Mixtures 52 Ethane-Propane Mixtures 53 Ethished Petroleum Products 53 Finished Laded Motor Gasoline 55 Finished Laded Motor Gasoline 50 Naphtha 59 Expecial Naphthas 0 Special Naphthas 0 Cotal Production 672	0480/0000000		<u> </u>	253 253 253 253 253 253 253 253 253 253	7,618 1,492 2,528 8,504 863 3,147 1,298 502 502 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9,926 1,647 10,038 1,333 3,846 1,492 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	19,727 1445 11,365 935 935 935 935 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Coast 2.853 2.853 4.997 2.383 3.47 1.579 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	T		O	34,470 3,846 3,846 622 30,885 7,045 10,472 109 6,418 2,609 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		West Coast. Coast. 15 943 373 373 373 373 373 373 373 373 373 3	States 6,773 6,321 -1,563 -1,563 15,381 6,542 15,381 6,542 15,381 6,542 10,40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Production represents manning of particular	509 94E	9	1,806	503	7,622	9,933 1	19,956	2,859	7,478	723	3,699 34	34,715 2	2,551	943	49,088

1 Production represents quantity of natural gas processing plant output less input to fractionating facilities. Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, November 1983 (Thousand Barrels, Except Where Noted)

	á	to and a			á	DAO District	=				DAD Dietrice III	III toliate			DAD	CAG	
Commodity	East		Total	Appala- chian #2	II, Ky.	Minn. Wisc., Daks.	Okla., Kans., Mo.	Total	Texas	Texas Gulf Coast	Gulf Gulf Coast	No. La., Ark.	New Mexico	Total	Dist. IV Rocky Mt.	Dist. V West Coast	United States
Crude Oil (including lease condensate) 24,732	24,732	2,485	27,217	1,879	55,610	8,532	18,884	84,905	14,731	89,394	59,771	5,268	2,178	171,342 13,106	13,106	63,507	360,077
Natural Case Limited																	
Natural Gasoline and Isobentane	142	0	142	0	458	536	944	1,638	1,138	1,925	576	8	102	3,824	113	210	5,927
Unfractionated Stream		0	0	0	0	0	0	0			0	0	0	•	0	0	0
Plant Condensate	0	0	٥	0	\$	0	5	97	0	658	9	181	0	845	45	0	. 987
Liquefied Petroleum Gases	287	88	345	<u>8</u> 2	2,495	510	1,239	4,425	89	2,049	2,013	151	9	5,133	383	558	10,844
Ethane	0	0	0	0	0	0	0	0	0	0	<u>æ</u>	0	0	ထ်	0	0	8
Propane	0	0	0	0	2	0 !	0	2	0	0 !	8	0 9	0 (8 6	- ;	0 8	123
Butane	236	28	294	8	1,622	445	æ,	2,967	290	560,	1,246	42	<u></u>	2,932	245	30 2	6,827
Butane-Propane Mixtures	0	0	0	0	_	8	0	8	0	22	g (0	20	82	æ '	2 (92
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o į	D :	o į
Isobutane	5	0	5	82	236	33	438	1,355	271	929	282	1 09	N	1,946	47	148	3,547
Other Liquids	;	•	;	•	;	,	(,	Š	Č	(•	ç	•	Ş	6
Other Hydrocarbons and Alcohol	82 4.964	217	5.18 18 18	0, 22	8 98 88 88	o (2	-157	382 989	17 279	7,355	707	253	, 4	8,643	-185	-156	1,593
Motor Gasoline Blending		•	•	!	}		į		i	•							
Components (net)	862	-36	826	4	1,229	ş	\$	1,272	183	361	2,330	-73	-98	2,703	-281	118	4,638
Avadon Gasoline biending Components (net)	4	0	12	0	7	0	19	92	0	-54	5	0	0	٣	0	9	36
Total Input to Refineries 31,081	31,081	2,724	33,805	2,076	60,958	9,388	21,032	93,454	17,209	101,952	65,785	5,863	2,292	193,101	13,181	64,740	398,281
Carda Oil Distillation																	
Gross Input (daily average)	921	83	1.004	69	1.880	305	644	2.899	505	3,069	2,007	177	73	5,831	437	2,111	12,282
Operable Capacity (daily average)	_	174	1,647	99	2,351	292	844	3,556	809	3,902	2,547	295	107	7,460	559	3,118	16,340
Operating Ratio (percent)1	62.5	47.5	6.09	104.6	80.0	103.3	76.4	81.5	83.0	78.6	78.8	59.9	68.1	78.2	78.2	2.79	75.2
Crude Oil Qualities																	
Sulfur Content, Weighted Average	;	;	i	!	į	,	l	ć	î	3	ç	,	Î	ć	Š	č	8
(percent)		원 경 각	8 6	42	9	1.49	75.	85. A	59	97.93	.93	1.42	0/.g	24. 58.	96. AG	10.1	26.55
API Gravity, Weighted Average	31.39	41.03	32.27	37.30	35.82	30.24	57.75	20.05	5/./5	53.53	0.00	36.73	59.55	70.	30.40	20.00	3
Operable Capacity (daily average)	1,473	174	1,647	æ ;	2,351	292	844	3,556	809	3,902	2,547	292	107	7,460	559	3,118	16,340
Operating	1,275	5 2	1,385 263	დ ⊂	2,113	232 0	121	3,195 361	4 5 5	3,744	2,335	8 6	è°	5,87. 489	2 8	253	1,392
1018 along the second s		5	101	,	Ì	>	,	ĵ	;	:	!	:	١				•

1 Represents gross input divided by operable capacity. Note: Total may not equal sum of components due to independent rounding. Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, November 1983 (Thousand Barrels)

,	<u>a</u>	PAD District			PA	PAD District	11				o va	1					
Commodity	East Coast	Appala- chian #1	Total	Appala- chian	Ind.	Minn. Wisc.,	Okla. Karis.,	Total	Texas	Texas),	No. La.	New	Total	Dist. IV	PAD Dist. V	United
Liquefied Refinery Gases	1] ;]		7 7 7	-	Daks.	MO.		2	Coast	Coast	Ank.	Mexico		Μŧ	Coast	Sauce
For Petrochemical Feedstock Use	415	~ ~	1,036	စ္ကင	1,708	55.	£ :	2,338	98-	3,045	2,826	96	79	6.000	G	708	10.264
For Other Uses	8	2	621	8	1 472	240	9 6	582	4 8	1,655	1,686	19	0	3,403	3 -	22	4 176
For Petrochemical Condesset 11st	0	0	0	0	0	7.0	9	, 500,5	⊕ -	1,390	 6.	29	79	2,597	88	825	6,185
For Other Hass	0	0	0	0	0	0	0	o c	•	200	<u>N</u> (0	0	711	0	0	Ε
Propane	0 7	5 ۵	0 (0	0	0	0	• •	0	325	νç	> c	00	376	Φ.	0	376
For Petrochemical Feedstock Use	- C	7 C	20 6	ဓ္ဌ	1,707	242	411	2,398	227	2,357	1,411	9	4	333	⇒ ţ	0 9	335
For Other Uses	579	2,	200	⊃ g	2 6	0 5	4 į	59-	\$	22.5	225	0	0	1.245	, 0	8 5	, 4, 4 5, 4, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6,
Butane	8	•	8	3 0		7.0	5	2,137	<u>\$</u>	1,380	1,186	23	4	2.850	172	726	1,520 6.485
For Other Heed Feedstock Use	8	0	8	0	ם ק	nσ	? 0	နှင့် ရ	-565	-117	1,403	S 3	۷.	1,053	99	67	1,082
Butane-Propage Mixtures	۲۵ '	0	짇	0	ιζ	0	-70	, ,	-285	704	65 4	ဂ ဂ	01	1,730	-	7	1,805
For Petrochemical Foodstack 12.2	0	0	0	0	o	0	0	g G	3 6	3 2	p c	ο α	~ ;	-677	-27	SS	-723
For Other Uses	0 0	0 0	0	0	0	0	0	0	10	ξ =	o c	V C	5 C	8	မှ '	8	88
Isobutane for Petro, Feed. Use	- C	> c	0 0	0 0	ရာ <u>၊</u>	0	0	ዋ	N	, <u>12</u>	0	۰ «		> g	ې د ا	<u>.</u> د	0 8
Finished Motor Gasoline	15.502	2 0	10.00	٥ ç	5 5	0		51		25	0	0	; c	3 6	3 0	\$ °	1 0
Finished Leaded Motor Gasoline	2000		420,07	56.7	35,648	5,006		53,893			32,251	1,898		92.034	6 796		70 001
Finished Unleaded Motor Gasoline	10.263		10,01	0 7	10,430	1,47	5,936	25,558	5,098		13,289	718		37,880	4.287	12,725	40,04
Finished Aviation Gasoline	12		2 2	ţ c	20,02	۸ ن		28,335			18,962	1,180		54.154	2,509		12 752
Naphtha-Type Jet Fuel	26		2 2	19	3 5	- 6		112			126	0		383	8		E. 1.
Kerosene-Type Jet Fuel	453	0	53	<u> </u>	200	7 5		923			261	168		2,690	385	1.464	6.095
Nerosene	362		463	7	1	, ç		φ. υ. υ.			7,033	က		14,674	562		26.190
Designate ruel Oil	6,450	705	7,155	453	11.893	2,38.5		3 6 6		,	1,130	92	φ	2,526	42		3,867
Noobtho / 400 D T. D	2,725	151	2,876	86	1.426	262		2005			96,5	1,647		38,303	3,767		80,376
Other Dife > 400 Deg. For Petro, Feed, Use	304		304	0	648	0		202	2,0		464.5	£ 1		10,820	338	9,325	25,454
Special Nanhthas	ro i		S.	0	142	0		192			2 6	<u></u>		2,695	٥		3,885
Lubricants	9 4		98	φ.	316	0		495			63	141		3.5	-,		7,952
Waxes	\$ •	2 6	828	0 (451	ο.		762			814	316		- 27	4 K		1,763
Petroleum Coke	200		N 6	- 6	4 1	0		£			110	28		200	3 1) <u>(</u>
Marketable	310		25.5	3 c	4,44	919		3,250			2,534	106		5.896	306		13 715
Catalyst	692		25	, ,	2,7	55.5		1,918			1,792	8		3,404	138	2,562	8332
Asphalt and Road Oil	2,017		2.027	3 12	0.0.0	- 4		1,332			742	83		2,492	168	681	5,383
Still Gas	1,544		1.647	\$ 6	300	300		יי קיני קיני			35	869		2,396	637	1,418	9,891
For Petrochemical Feedstock Use	306		306	0	,	3 0					2,700	208		8,366	516	3,491	17,535
For Uther Uses	1,238		1,341	2	2.390	322	737	2 24.2			9 7	0 5		543	58	48	927
Miscellaneous Products	146		185	ന	77	i x	64	3.5		4 0,00 0,00 0,00	2,014	208		7,823	488	3,443	16,608
Non-Fire Use	0 9		23	0	ო	0	· 00	? . =	0	} ~	3 %	g c		7,720	. 38	163	2,269
	146	σ	164	ო	74	34	4	152	7.	928	315	98	9 0	382	4 4	8 5	402
Total Production	32,700	2,697 3	35,397	2,138 6	63,439	9.773	21.617	96 967 1	17 155 10	406 424	6	į	, ,				?oo'-
Processing Gain(-) or Local 11	,								3	_	264,00	716,0	2,309 2	200,294	13,552	68,431 4	414,641
	6L0, L-	- 22	-1,592	82	-2,481	-385	-585	-3,513	54 -	-4,469 -	-2,707	-54	-17	-7,190	-371	-3.691	-16.360
Represents the softweet's different to the																	2,0

1 Represents the arithmetic difference between input and output. Note: See Explanatory Note on negative production. Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District, November 1983

	ď	D Distric	=		ď	PAD District	===				PAD District	trict III			PAD	PAD	
		- Appala-		Appala-	-	Minn.	Ö		1	Texas	Ľ,		-		Dist. IV	Dist. V	United
Commodity	Coast	chian #	Total	chian #2	ind. ≡. Ky.	Wisc.	Kans.	Total	Inland	Gulf	Gulf	No. La.,	Mexico	Total	Rocky Mt	West	States
The state of the s												•		!	1	:	ģ
Finished Motor Gasoline2	47.9	37.4	47.0	53.6	55.1	49.6	52.1	53.8	49.4	43.6	9.	28.2	36.7	43.8 8.0	50.6	44.6	40.8
Finished Aviation Gasoline3	o.	Q.	0.	0,	ςį	ó	7	Τ,	κį	ωi	ςį	O,	o.	ςį	ςį	- ,	νi
Liquefied Refinery Gases	3.4	œ	3,2	2.0	3.0	8,5	1.8	2.7	ı, ci	3.1	4.7	1 .	3.5	33	۲.	1.4	2.8
Naphtha-Type Jet Fuel	2.0	1.6	20	4	۲.	4.	1.7	- :	4.5	oi	o,	3.0	18.2	1.5	3.0	23	1.6
Kernsene-Tvne Jet Firel	5.	0	7.	αó	5.3	4,6	3.3	4.7	4.0	7.2	11.6	-:	5,5	8.2	4.3	10.2	7.0
Kerosene	2	3.7	7	5.9	Ξ	Ŋ	εvi	6	κį	4.	1.9	ιú	ا ئ	4.	က	O,	1.0
Distillate Fuel Oil	21.7	26.1	23	24.0	21.1	27.5	29.6	23.7	23.6	21.6	19.0	29.8	33.3	21.3	29.5	17.2	21.5
Residual Fuel Oil	9 2	5,6	8 0.0	5.2	2.5	3.0	1.7	2.4	4.1	9.9	5.8	4.6	2.8	6.0	5.6	14.7	6.8
Naphtha < 400 Deg. F. Petro, Feed, Use	0.1	0	οj	0	1,2	0	ωį	œί	3.8	<u>6</u>	ω	1.8	0	5.	0	ιń	0,1
Other Oils > 400 Deg. F. Petro, Feed. Use	O,	0	o.	0	ιú	0	-	κi	۲-,	5.2	e 9	0	0	4.0	o;	0.1	2.1
Special Naphthas	τ:	7:	٠-,	0	œ	0	1.0	œ		0:	۳.	5.6	0	۲.	o.		πj
Lubricants	יני ני	14.1	2.6	0	ισί	0	1.7	οj		21	<u>ب</u> ن	5.7	0	1.8	ω	ø.	1,4
Waxes	77	2.7	ιń	0	0	0	ςĄ	۳.	Ó	- ,	κi	7.	0	κi		 ,	- .
Petroleum Coke	3.4	۲.	3.1	함	4.0	4.8	3.0	3.8	6.	3,	4.2	1.9	ιú	3,3	2.4	 	3.7
Asnhalt and Road Oil	6.8	4	6.3	3.0	4.2	6.4	2.4	0.4	3.8	4	o,	15.7	2.8	ŭ	4.9	2.2	2.6
Still Gas	5.2	3.8	5.1	3,4	4.2	3.7	3.9	4.	29	5.1	4.5	3.8	5.0	4.6	4.0	5.5	4.7
Miscellaneous Products	τύ	4.	ø.	κį	۲.	4.	က	Ŋ	ιú	0.	<u>-:</u>	7.	0	0.	ιú	ωί	œί
Processing Gain(-) or Loss(+)4	5.5	0.	4 vi	-3.3	4.	4.	မှ -	4.	4.	4.6	4 3	-1.0	8.	4.0	-2.9	5.8	4.4

Based on crude oil input and net reruns of unfinished oils.
 Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.
 Based on finished aviation gasoline output plus net output of aviation gasoline blending components.
 Represents the difference between Input and Production.
 Note: Totals may not equal sum of components due to independent rounding.
 Note explanatory Note on negative production.
 Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, November 1983 (Thousand Barrels)

Commodity			Petroleum Administration for Defense Districts	n for Defense Districts		
	-	=		74		
Crude Oil (including lease condensate) 1.2	21 995			2	>	Total
Natural Case Librarias	2006	18,855	52,401	1,257	4.834	00 350
Natural Gasoline and Isonostone	857	3 814	G			700'00
Plant Condensate	240	0	200	549	320	5.830
Liquefied Petroleum Gases	41	·a	o 6	0	0	240
Ethane	226	3.811	0 00	151	0	103
Propage	0	1,0,0	582	398	320	50E 3
Russa	423	064	o	0	2	060'6
Britano Drocos Afrikasia	52	1020	- '	243	· 82	060'-
Charle Mixtures	C	OSO'I	0	155	257	ξ .
Estable-Frobane Mixtures	, c	2	292	0	Š	080'I
·	,	176	0	0	oc	292
	2 805	ì			Þ	1/6
Unimished Cirs 1	2000	787	5,609	69	4	
Motor Gasoline Blending Components	2,2,2	212	5,189	1 6	7°	9,226
Aviation Gasoline Blending Components	n c	49	420	ļc	- 6	689'/
	5	0	0) c	504	1,537
Finished Petroleum Products	. 60			Þ	o	٥
Finished Motor Gasoline	35,534	799	2.982	Ş		
Finished Leaded Motor Gasolino	7,416	29	190	<u> </u>	1,175	40,639
Finished Unleaded Motor Constinut	3,436	20	200	24 :	338	8,063
Finished Aviation Gasoline	3,980	15		42	92	3,820
Naphtha-Tyne let Elel	-	. 0	o c	r- (246	4.243
Kerosee Two to East	0	c	> 0	o	0	. .
Ronded Aircraft First	410		> f	0	0	. 0
Other	0		ñ	0	88	550
Каплера	410	, c) 11 C	0	0	0
Distillate First Off	723	• 6	ò	0	84	550
Books Okins Dusting	4,871	250	2 1	Ď	0	723
Other	0	10	ò°	78	205	5.663
Booking Cost On	4,871	250	0 10	0	0	C
Board Office Office Control of the C	20,946	346	/67	78	205	5 663
Other	0	,	,45,	28	509	23.317
	20.946	076	o !	0	0	
Naphtha < 400 Deg. for Petro. Feed. Use	240	£ 47	1,487	28	509	20 27 1
Offner Oils > 400 Deg. for Petro. Feed, Use) C	20 (360	0	3	115,62
Special Naphthas	75.4	ð	0	0) c	<i>951</i>
Lubricants	.	g	464		Ç	0
Waxes	2	12	42	03	⊻ ;	1,264
Asphalt and Road Oil	48	ო	1	(e)	12,	202
Miscellaneous Products	16	ო	- c	-	N	ဓ
	4	64	92	5	, .	ଛ
Total Imports			2	(s)	CV.	8
The state of the s	61,190	23,738	61.285	400		
Onde oil and unfarithed oils			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2,016	6,818	155,047

¹ Chude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry. 2 Includes crude oil imported for storage in the Strategic Petroleum Reserve. (s) Less than 500 barrels.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels)

Crude LPG ished Compo- Gasoline Dil 1 Oils Compo- Gasoline Gasoline
00
302 0
1,169 0 0 0 20,284 302 0 0
c
v 0
0
0 0
0
5,236 0 241 0
0 2,097
0 0
4,688 279
844 0 0
114 0
19,095 293 3 579
0
0
0
0
0
0 1,377
0
0 0 0
1,551 (s) 1,810
53,833 5,096 7,447 1,537
99,352 5,398 7,689 1,537

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels) (continued)

			 -											
Source	Crude Oil +		Unfinished Sished	Gasoline Blending Compo- nents	Finished Motor Gasoline	Fuel	Kero- sene	Distil. Ouel	Resid.	Special Naphthas	Other Prod-	Total Prod-	Total Petro-	Total (Daily
A-1- America							DAN D	DAD Dietrict 1			2	nces	leum	Average)
Arab OPEC							5	Surct 1	ļ					
Saudi Arabia	3,707	302	00	00	0	0	0	o	2.040	c				
Subtotal Arab Emirates		0	0	> C	0 0	0 (0	0	j	0	9 6	2,040	3,211	107
Seutotal Arab OPEC	4,878	302	0	• •	> c	0 (0	0	519	0	> C	300	4,009	134
Other OPEC				,	>	5	0	0	2,559	0	• •	2,861	7.738	17 258
Ecuador		0	0	0	c	c	(
Indonesia	1,009	٥ ٠	0	0	0	90	0 0	0 c	192	0	0	192	192	Œ
Nigeria	630 830	> c	0 0	0 (0	0	0	0)	0 0	0 0	0	1,009	, &
Venezuela	1,685	• 0	> c	-	0 ;	0	0	0	0	> c	> c	0 0	2,624	87
otal O	6,147	• 0	00	a c	1,812	00	243 243	667 667	3,547	0 0	00	0 6,269	830 7,954	282 265
Other								į	5	5	0	6,461	12,609	420
Bahamas	281	0	0	0	0	0	C	c	ď	,				
Brazil	> c	0 (۰ (0	0	0	. 89	373	2 G	0 0	0	0	581	19
Canada	923	159	Φ 4	-	384	0	0	0	334	-		1,936	1,936	65
France	0	114	n c	> c	<u>5</u>	0	ო	338	292	· ‡	(e)	5 5	719	54
Mexico	2,099		0	579	> c	00	0	0	٥	- 0	£ (§)	200,1	1,983	99
Netherlands Aprilloc	 (0	0	0	462) (-	594	467	0	°	1,640	3.739	4 r.
Nonway	٠ ,	o	1,245	0	509		3 6	> 6		4	(s)	826	827	8
Oman	492	o c	0 0	0	0	0	. 0	<u> </u>	- 5 5	O 0	0 (3,907	3,907	130
Peru	0	0	> c	0 0	0 0	0	0	0	0	9 0	5 c	0 (1,141	38
Puerto Rico	0	0	416	0	507	0 0	0 1	0 8	1,792	0	0	1,792	1792	916
Spain	0 0	0 (٥.	0	494	• •	<u> </u>	8 0	0 6	156	118	1,510	1,510	8 6
Trinidad and Tobago	-	-	0 0	۰.	o	0	0	0	178	9 8	240	1,303	1,303	43
United Kingdom	4,127	0	> c)	۰;	0	٥	214	320	-	-	1/8	178	9
Virgin Islands	0	0	559	- c	181	0 ;	0	0	0	, 4	S	40.4	534	<u>e</u>
Other Worth	1,061	0	0	0	ر در	0 0 0	305	2,290	6,767	0		12.064	25.4.7	1 5
Hemisphere	c	(,	•	>	>	0	0	0	0	1,061	35.
Other Eastern Hemisphere	546	০ ভ	o c	0 0	0 ;	0	0	0	679	c	c		į	
Subtotal Other	10,969	274	2.225	579	7594 5504	0 (0	(s)	220	1 417	6/9	8 8
Total Imports	6	i	!		4,004	410	480	4,204	14,648	754			40,843	1361
***************************************	21,395	9/6	2,225	579	7,416	410	723	4,871 2	20,946	754	696		61 190	
						"	PAD Dietriot II	=						2,040
Arab OPEC							Just Ch	=						
Saudi Arabia	966 1,881	00	00	00	00	0 (0	0	0	0	0	-	990	8
Subtotal Arab OPEC	2,747	0	0	, 0	>	> 0	00	٥	00	0 6	0	0	966 1,881	දැ ස

នួនន

1,881 2,747

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels) (continued)

00 0 00000 00000		240 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	(s)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	(8)	293 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels) (continued)

Source	Crude Oil 1	.PG	Unfin- ished Oits	Gasoline Blending Compo-	Finished Motor Gasoline	Jet Fuet	Kero- sene	Distil.	Resid.	Special	Other Prod-	Total Prod-	Total	Total
				inenits				5	ā	CONTRACTOR OF THE PARTY OF THE	ucts 2	cts	leum	Average)
į.							PAD District III	strict III						
Norway		•												
Oman	1530	0 0	0 0		0	0	0	o	•	•	•			
Puerto Rico		0	> c	o c	06	0	0	0	•	00	o c	00	499	4
Tricial	•	0	٥		-	-	0	٥	0	145	0	144	1,530	ភ
United Kingdom	20°	0	0		0	-	0 0	0 0	Q (0	28	8	1842	ი წ
Virgin lelands		Q	0		0	· c	• •)	o ,	0	0	٥	299	5 6
Other Western	D	0	817		0	0	0	90	238 0	00	0 6	0 6	4,659	155
Other Eastern II.	0	0	0	0	c	c	•	ij) II	2	\$5."	R2.'	89
Subtotal Other	552	0	1,810	0	o c	> c	> 0	0 (0	90	104	164	164	ч
Capital Ollier	26,472	293	4,948	420	96.	<u>ئ</u> ا	> c	0 6	383	₹,	7	2,228	2.781	ng
Total Imports	52.401	ç	i i			5	>	ş	621	982 286	517	7,547	34,019	1,134
	104,40	88	5,189	420	199	57	0	257	1,487	464	517	8,884	61,285	2,043
•							PAD District IV	≥ to						
Othor								2						
CanadaSuhtotal Other	1,257	398	62	0	42	c	c	ş	ł					
	/62,1	398	62	0	42	0	00	87	88	<u>©</u>	152 152	759 759	2,016	67
rotal Imports	1,257	398	85	٥	42	0	0	78	9 8	(s)	152	759	2016	5 G
		·					PAD District V	ict V						5
Other OPEC														
Indonesia	4,687	0	0	0	80	ţ	•	!						ļ
Subtotal Other OPEC	4,687	0	0	0	86	4 4	> ¢	446	<u>당</u>	φ.	(s)	541	5,229	174
Other						!)	2	8	5	(S)	541	5,229	174
Canada	147	320	-	0	29	o	C	c	¢	,				
Netherlands Antilles	.	ь.	0	0	o	0	· c	α	Du	2	C)	408	554	18
People's Republic of China	- c	٥ د	0 0	٥	0	o	0	0	194	> c	m	7;	17	-
Other Eastern Hemisohere	0	o c	> c	488	0	0	0	o	0	0	> <	90	194	ဖ
Subtotal Other	147	320	> +-	488	£ 5	98 %	00	22 52	154	0	2.4	336	336	9 ==
Total Imports	700 /	ç	•			}	>	3	200	12	92	1,443	1,589	23
	+co't	320	-	488	338	84	0	205	509	5	26	1 987	010	9
Includes crude oil imported for storage	for storage	in the Strategic	tegin Patro	0000 a								· }		/77

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.
 Less than 500 barrels or less than 500 barrels per day.
 Note: Totals may not equal sum of components due to independent rounding.
 Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports Of Crude Oil And Petroleum Products By PAD District, November 1983 (Thousand Barrels)

		Petroleu	Petroleum Administration for Defense Districts	n for Defense	Districts	
Commodity	_	11	#	2	>	Total
Crude Oil (including lease condensate) 1	0	248	0	0	5,319	5,567
to the first of the factor of the first of t	ĸ	-	728	0	215	980
Liquence removed in Gases) (s)	0	(s)	0	0	(s)
Devoted	13	7	447	0	85	551
Distance of the contract of th	12	ທ	282	0	130	429
Dutano Dranano Mivilirae	0	0	0	0	0	0
Chiebad Motor Gaeolino	. 67	0	6	0	ო	99
	0	0	O	0	0	0
Kanada Type Jet Frei	122	0	506	0	45	373
	(8)		(S)	0	•	2
Distillate C.o. Dil	;	7	505	0	1,108	1,614
Desidual Final Oil	(s)	0	2,324	0	2,674	4,998
Manhaban / And Dan for Betrochem Toedstock	, <u>(</u>	g	96	(8)	12	175
Other Oils A 400 Deg. 101 Featuration Feedstock	· •	59	435	0	50	516
Constitution Only 1400 Degr. 101 1 to constitution 1 to constitution 1	· ca	4	45	0	8	54
Opecial Mapirales	124	22	178	-	77	405
Money	4	-	5	0	খ	24
Potential Colo	36	318	3,021	0	2,182	5,556
	~	4	(S)	-		1
Appendiance of Describes	. 45	8	τΩ	0	4	38
Total Product Exports	401	400	7,629	€	6,379	14,812
	401	648	7,629	α	11,698	20,379
Total Exports		2	, ,	1		

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

(s) Less than 500 barrels sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, November 1983 (Thousand Barrels)

Total (Daily	Average)	٤	2	ĽΩ	2		<u>s</u>	- [) 4	(e)	, (g)	<u> </u>	<u>(s)</u>	m	<u>ر</u>	<u>ن</u>	2 8	10	(\$)	(S)	(s)	8	(5)	E 3	(S)	~ <) (s)	8	(s)	,	8	5 5	(S)	(s)	9	(s)	3 8	3 ~	က	(S)	۲.	- 5	£ @		0		- (s)	
Total		•	218	140	65	69	(e)	3 5	, *	940	, e) 4	-	84	, 22 25	<u>.</u>	S	294	•	(s)	(S)	: S	ę	3	2	, c	, ,	1,803	(s)	9 39	2,97	643	(s)	-	172	. g	1.168	2	92	(s)	8,6	3	6	217	28	8 8	2 2 2	
Other		(S)	9	(s)	Ο,	- 3	<u>@</u>	3.0	3 ~		<u>(</u>	(E)	(s)	- -	© €	(S)	0	69		(s)	(- 5		2 6	чc	(s)	225	<u>(8</u>	(S)	(S)		0		(S)	- o	, 4 2	0	က	0		2		(s)	20	- -	· N	
Asphalt		0	(2)	0	<u>(</u>	> c	o c	ο e\		(S)		0	c		<u></u>	0	0	0	0	0		Ø (<u>o</u> g		> C	0		(s)	0 0	⊃ 2		φ.	0	0 (>	9 0	Φ	(s)	0	0 (> c	0	(s)	0	0 0	§	0	
Petro- leum	Coke	0	193	۰;	\$ 60 4 00	9 0	8	419	0	8	(S)	0	0 (⊃ () C	0	0	222	0	O (0 0	> c	> <	· c	· c	0	(s)	906	0 0	- - - - - - - - - - - - - - - - - - -		153	0	0 0	> c	, ¥	494	0	æ °	o c	<u>ج</u> د	90	0	0 (o c	8,	0	
Waxes		0	(s)) (S)		•			(s)	(s)	© (<u> </u>	<u> </u>	0	(S)		-	0		<u>2</u>	•	- •	·		0	0	·- (o c	o e:	0	<u>(s)</u>	0	00	o c	, m	0		® ,	> c) (S)	0	(s)	© (<u>6</u>	; =	0	
Lubri- cants		(s)	£.	- §	ون (آ	<u>(s</u>	(S)		Ø	12	€V.	m ,			(S)	24	(s)	- - ,	- 1	<u>(s)</u> (g)) oc	·	(s)	8		(s)	- <	> +	47	· -	-	(s)	- (e)		84	17	(s)		ବ ହ	5	(s)	6	 1	- 4	თ	7	
Special Naphthas		0	4 0	> c	·		0	9		<u> </u>	<u>(s)</u>	®		(8)	(B)	0		(e)	> (⊃ (¥)		0	0	0	0		<u>ه</u>		,	۸ ر		©	(S)	- c	0	5		(e)	c	-	0	0		(S)	· (8)	0	<u>(s)</u>	
Residual Fuel	5	0	(S) 127	3 0	0	٥	0	226	0	865	0 0	⇒ c	•	0	0	0	0	5 C	0 0	0 0	> 0	0	0	0	0	0	0 0	S	0	953	0	476	-	172	0	0	408	> c	,	0	0	0	0 (> c	(<u>s</u>)	0 (o 	
Dist. Fuel	!	ο,	- (S)									0			٣																														0		- 1	
Jet		3	0	0	0	0	0 1	0	> <	> c	• •) O	0	0	0	-	>	0	· c	0	0	٥	0	0	0	0 0	> c	0	0	0	0 0	> c	0	0	0	ئ	> c	,	0	206	0	0	> c	0	0	0 0	2	
Finished Motor Gasoline	٠	2		0	0	0		<u> </u>	0 0	o c	· •	0	0	10	0 (5 C	9	0	Ö	0		<u>(s)</u>	0	0	0 (0 6	-	0		(s)	0 0	> c	0	٥	0	ო ი	<u>ي</u> د	3 0	0	0	0	0 0	> c	· 'O	₩.	o c	3	
LPG	(8)	Ē	(S)	0	0	0	> -	<u> </u>	ક	0	(s)	(s)	82	<u>8</u>	0	<u> </u>	- c	0	0	0	51	-	છ ઉ	,	- C) (8)	5	0	33	0 4	о т	tc	0	(s)	- ;	494	<u> </u>	(S)	(s)	0	0 (⊃ c) (§)		£	€	-	
Crude Oil 1	0	0	0	0	0 0	> c	24B	0	0	0	0	٥	0	۰.) C) C	• 0	0	0	0	0	o 0) (.	> C	, c	0	0	0 (0 0	- c	• 0	0								0 0	>	o	0	00	0	, 	
Destination	Argentina	Australia	Bahamas	Bolding & Committee	Brazil	Cameroon		Chile	China (Taiwan)	Colombia	Costa Rica	Denmark	Dominican republic	Form	El Salvador	Finland	France	French Pacific Isl	Grana	Greece	Hondurae	Hong Kong	India	Indonesia	Iran	Israel	Italy	Vory Coast	Japan	Jordan	Korea, Republic of	Kuwait	Lebanon	Molecula	Mexico	Netherlands	Netherlands Antilles	New Zealand	Nicaragua	Notation	Pacific Trust Terr	Panama	Peru	Philippines	Rep. of South Africa	Saudi Arabia	See footnotes at and at take.	15than 10 2112 to 2012 1112

Table 19. Exports of Crude Oil and Petroleum Products by Destination, November 1983 (Thousand Barrels)

(continued)						,								
			Finished		Dist.	Residual	,	1	-	Petro-				Total
Destination	Srde -	PG	Motor	Fuel In	3 5	<u></u>	Special	cants	Waxes	Soke	Asphalt	Other	Total	(Daily Average)
	- - 5	c	Gasomie	c	5	0	က	-	(s)	0	(s)	-	2	(8)
Singapore	0 0	o c		c	· C	400	c	•	(2)	713	0	4	1,258	45
Spain	.	0	> C	•	· c	2	0	<u>(S</u>) }	£	٥	(s)	4	(s)
Surnain	o c	•	,	· c	· c	311	0	-	(S)	-	0	;	314	10
Sweden	> C	é	0 0	· c	· c		0	জ	(S)	9	0	-	92	m
SWIZERIAND	> C	Œ	o C	· c	· C	0	•	. 4	(8)	0	0	-	16	-
Timing and Tobaco	, c	9	0	13.	· C	0	0	2	(S)	-	0	<u>@</u>	125	4
Tillidad alfu tobago	o c	C	•	•	· C	0	(s)	រោ	0	0	0	16	2	_
Linkey Arch Emirates	0 0	(g)	0	0	0	0	0	(s)	0	36	(<u>s</u>)	(s)	24	64
This distance	, c	Ē	· C		. **	0	ო	;	(s)	9	· ©	m	39	-
The contract of the contract o	, c	- c		· C	. 0	0	(S)	•	(S)	0	0	<u>(s)</u>	N	(s)
Version of	o c	e e	o c	· c	·	0	, ,	•	(s)	88	(s)	m	98	ო
Venezuela	A 785	0	· c		C	380	0	(S)	•	0	0	0	5,165	172
Vigili Islands	f	· c	c	· C	0	0	(s)	;	(§)	4	0	e	đ	(s)
West delinary	• •	•	• •	· c	· C	C		0	0	0	0	0	0	0
Tugoslavia	2	. 5	· c	· c	(8)	0	(s)	F	(s)	0	4	17	9/9	ន
Total	5,567	980	9	373	1,614	4,998	54	402	24	5,556	4	731	20,379	629

¹ Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding. Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels)

	Commodity	East PA	PAD District I Appa- lachi-	t i Total	Appa- achi-	fnd,	PAD District II Minn., C	Okla.		Техас	Texas	PAD D				PAD Dist. IV	PAD Dist.	1
10.053		No ass	an #1		an #2	≣. Ky	Daks.	Mo.	otal	Inland	Gulf Coast	Coast	Z	New Mexico	Total	Rocky Mt.	West	States
		1	1	12,928	I	1	ļ	1	14,277	1	ı							
40.831 3.082 43.913 1.062 41.731 6.224 14.833 6.3840 10,169 76.568 47.068 5.092 1,506 140,413 10.990 60,249 83.192 224		I	1	, 8	11	1 1		1 1	57,703	1	1	1		П	46,336 93,732	1,885 9,885	23,090	98,516
40.831 3.082 43.913 1.052 41,731 6.224 14.833 63,840 10,153 75.568 47.058 5.092 15.56 140,413 10,990 60,249 63,192 224 48 210,575		1	1 1	0 0	ŧΙ	11	1.1	H	200	1 1	ΙΙ	ŧ 1		1-1	17,271 371,291	1,396	1,721	22,021
		f	ł	14,233	ı	ł	1	1 1	73,553	1 1	1 1	f 4	1-1	1.#	528,630	13,166	29,588 83,192	29,588 29,588
10 10 10 10 10 10 10 10		ç																i
224 48 30,048 - - 96,341 2778 24,623 278 24,623 278 24,623 278 24,623 278 24,623 278 24,623 278 24,623 278 24,623 278 27,623 27,723 24,120 17 27,723 27,723 27,723 27,723 27,723		1,831	3,082	43,913 136,643	1,052	41,731	6,224	14,833	63,840	10,159	76,568	47,058	5,092	1.536	140 413	10 000	0.00	9
16 0 16 0 16 0 16 10 <td></td> <td>182</td> <td></td> <td>30,048 272</td> <td></td> <td>1 223</td> <td>23</td> <td>1.343</td> <td>36,073</td> <td>1 1 8</td> <td>11</td> <td>1.1</td> <td>1.1</td> <td>1.1</td> <td>95,341 39,676</td> <td>2,785</td> <td>24,951</td> <td>356,026 112,223</td>		182		30,048 272		1 223	23	1.343	36,073	1 1 8	11	1.1	1.1	1.1	95,341 39,676	2,785	24,951	356,026 112,223
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		ı	1	210,876	1	1	1	2	197,838	1.08	£ 1	e 1	۱ ع	1 235	7,584 283,014	218 16,485	152 89,286	9,845 797,499
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Refinery Bulk Terminal	16	٥	<u>₹</u>	0	86	99	114	238	00	Ę	ģ	,	•				
- -	ocessing Plant		1 5	40		1 1	1-1	1-1	1,015	!	<u>}</u> [<u>,</u> -	- 1	D	466 2,332	<u>5</u> 0	ωΝ	738 3,355
$\begin{array}{cccccccccccccccccccccccccccccccccccc$,	1	. S	5	R 	= 1	152	183 1,791	780	172	192	57	1 4	712	ਦ ਦ ਲ ੈ∣	8 2	1,045 980
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					•									ı	4,180	2)	ဗ္ဗ	6,118
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				00	1 1	1 1	ı	1	2,371	1	1	J	1	ı	1 413	c	ď	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0	e 	000	0	104	N	791	211 897	198	1.844	1 2	1		2,537	466	00	3,784
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				ס	ì	I	ı	ľ	3,479	ł	-1	! ,	I	2 	6,13 13 13 14 15 15	9 9 9 9	00	3,114
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ļ	0	0	o	0	£	c	c	ч	c	;							
690 9 699 313 2,140 123 641 3,217 320 371 2,780 36 22 3,529 294 570 200 33 2,237 39 39 5,077 39 2,589 39 39 5,077 3,330 45 13 200 33 2,238 0 96 39 39 5,077 3,330 45 0 200 33 2,238 0 96 38 397 5,69 27 491 55 17 4,334 113 130		H	1 1	0 0	1	1	,	· I	90	າ 	 4		62		601	0	0	114
690 9 699 313 2,140 123 641 3,217 320 371 2,780 36 22 3,529 294 570 200 33 2,33 0 95 38 397 530 926 2,725 491 55 177 4,334 113 130		٥ ا	0	000	o 		ļ ~	ო 	۷ ٥	1 8	8	1 *			288	90	00	288
690 9 699 313 2,140 123 641 3,217 320 371 2,780 36 22 3,529 294 570 - - 2,257 - - - 26,985 - - - 6,073 108 2,589 200 33 2,33 0 95 38 397 5,677 - - 3,330 45 0 - - 5,775 - - 36,809 - - - 36,809 - - - 130	İ		1	5	ł	1	I	1	12	}	}	<u>†</u>			48 184	1 4 4	00	102 507
200 33 233 0 95 38 397 530 926 2,725 491 55 177 45 0 200 33 2,775 - - 6,077 - - 6,077 - - 6,073 108 2,589 200 33 2,23 0 95 38 397 530 926 2,725 491 55 177 4,574 113 130 30 36 36 36 36 36 36 36 36 36 36 36		069		669	313	2,140	123		3,217	320	37.	0 780	ć					
200 33 233 0 95 38 397 530 926 2,725 491 55 177 4,334 113 130		ءً ا ا		2,586		1.1	11		26,985 6,077	; 	;	3 1 1	ا ئ		3,529	294 108		8,309 92,672
		}	3	5,775	9	8	88		530 36,809	956	2,725	491	S		3,330 4,374	113		12,038 5,380

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

	۵	PAD District 1	_		PAI	PAD District II					PAD District III	trict III			PAD	PAD	
Commodity	East Coast	Appa- lachi- an #1	Total	Appa- lachi- an #2	Ind., III., Ky.	Minn., Wfsc., Daks.	Okła., Kans., Mo.	Total	Texas	Texas Gulf Coast	La. Gulf	No. La., Ark.	New Mexico	Total	Dist. IV Rocky Mt.	West Coast	United
Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Total		11 1	00000		11,1		0 1 0 1 1 1 1 1 1 1	16 873 1,040 48 1,977	0 0	ot 1 1 575 1	111	0 0	0 6	10 4,651 380 586 5,627	000++	00000	26 5,524 1,420 635 7,605
Propane for Petrochemical Feedstock Use Retinery	es 1	0	4 4	0	8 8	0	0	88 88	N 		8	0	0	88 88	00	00	171
Propane For Other Uses Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Total	615 	11 1	620 1,766 2,415 220 5,021		1,429	33	257 	1,719 18,300 2,919 202 23,140	1 1 4 1 1	311 80	1,215 	9 7 7 1		1,361 27,195 1,063 1,205 30,824	150 108 10 76 344	155 747 0 116 1,018	4,005 48,116 6,407 1,819 60,347
Butane For Petro. Feed Use Refinery	١	١	00	1	o l	29	١	8, 8,	0	20	o 	- 1	0 	22		8 8	53 53
Butane For Other Uses Refinery Bulk Terminal Pipeline Natural Gas Processing Plant	1	4 0	33 396 150 12 591	279	£ 1 1 1 1	0g 6 	261 46 46	1,001 2,565 983 65 4,614	138	1.046	670 	 # #	1 8 4 %	1,036 13,309 496 1,494 16,335	108 0 0 35 143	286 1,192 0 9 1,487	2,464 17,462 1,629 1,615 23,170
Butane-Propane Mixtures For Other Uses Refinery Bulk Terminal Pipeline Natural Gas Processing Plant		0 0	00000		0	0 0	0	393 20 0 415		6 7	» ۵ ۱۱ ۱	- ~	- 0	15 650 8 713	ო 000ო	92 533 0 2 627	966 966 670 10 1758
Ethane-Propane Mixtures Bulk Terminal Pipeline Natural Gas Processing Plant Total	11 1		0000		111		1 20	3,392 699 189 4,280	1 1 1 1	1 1	11 1	0	1	9,725 556 158 10,439	0 35 0 35 0	0000	13,117 1,290 347 14,754

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

	United States	1,478 7,487 622	954 541 282 282	25,130 18,750 44,882 20,232	08,994 38,807 1,038 65 65	287 287	44,707 96,919 54,380 30	380 629 373 18 400
		- 5.0	3 155 10, 4				•	
	PAD Dist.	Ö		4,153 4,115 11,119 5,284	24,671 6,937 22 0 0 6,959	88	7,092 10,598 1,964 0 0	3,258 5,208 825 0 0 9,291
	PAD Dist. IV Rocky	32 0	- E 0 0	554 444 1,314 533	2,845 1,969 1 0 1,970	00	2,501 1,670 1,223 9 5,403	1,655 1,049 747 7 3,458
	Total	1,048 5,813 185	7,969 7,969 101	12,931 8,733 19,313 7,896	18,123 698 17 18,838	183 183	18,414 13,422 19,314 0 51,150	8,641 6,847 9,766 0 25,254
	New	1		93 130 0	255	0	230	£ 1 1 1
1 10/10		_ 。 "	1 1	138 28 186 56 56	39 1 1 1	o 	755	336
0 0	La. Gulf No. La	863	5 1	5,238 1,268 7,472 3,172	5,844	15.	5,387	2,579
	Texas	783	1 88 1	6,706 6,764 10,540 4,402 28,412	10,268	88	9,776	4,363
	Texas	10 10 2	I - I	756 665 985 266 2,672	1,591	o	2,266	1,230
	Total	361 1,462 416 26	2,265 119 119	3,697 3,532 6,354 4,586 18,169	7,421 95 48 7,564	8 84	11,409 32,796 16,644 0 60,849	5,876 16,825 8,308 0 31,009
	Okla. Kans.,	123	, 	1,044 962 1,296 1,386 4,688	1,369	54	3,205	1,943
PAD District II	Minn. Wisc., Daks.	<u> </u>	, l	175 282 9 468	8 111	0	1,682	885
PAI	Ind., II., Ky.	28 1 E	1 5 1	2,568 2,568 4,638 3,189	5,207	8	6,437	3,006
	Appa- lachi- an #2	¥ 0	1 1	39 0 138 2 179	45	0	8 0	54 O
	Total	0. 0. L. L. d.	588	3,795 1,926 6,782 1,933 14,436	4,357 222 0 4,579	00	5,291 38,433 15,235 21 28,980	1,950 16,700 8,727 11 27,388
PAD District	Appa- lachi- an #1	0 0	o 	141 25 297 269 732	1 1 1 28	о 	8 1	169
PA	East Coast	0 ← 	83	3,654 1,901 6,485 1,664 13,704	1,23	0	5,001	1,781
	Commodity	Isobutane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Total	drocarbons and Alcohol		Motor Gasoline Blending Components Refinery Bluk Terminal Pipeline Total	Refinery Total Total Finished Motor Gasoline		Finished Leaded Motor Gasoline Bulk Terminal Pipeline Natural Gas Processing Plant Total

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

Casoline Casoline	!	ď	PAD District	1		PAI	PAD District II	=				PAD District III	strict III			PAD	DAD	
Colored Colo	Commodity	East	Appa- lachi- an #1	Total	Appa- lachi- an #2		Minn., Wisc., Daks.	Okla. Kans., Mo.	Total	Texas	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico	L	Dist. IV Rocky Mt.	Dist. V West	United States
183	ished Unleaded Motor Gasoline lefinery utk Terminal	3,220	114	3,341 21,733 6,508 10 31,592	4	3,431	797 	1,262 - - -	5,533 15,971 8,336 0 29,840	1,036			, , ,				_	23,327 50,290 26,007 12 99,636
1284			111	38 411 0 0 449		150	0 0	1 1	166 383 52 0 0	126	908	11 1			619 155 3 52 829		179 294 0 0 473	1,050 1,253 1,253 55 52 52 52 1,410
1,284 0 1,284 65 1,438 96 98 1,697 225 3,262 2,928 14 79 6,508 241 2,833 2,168 2,142 2,189 2,41 2,189 2,41 2,189 2,41 2,189 2,41 2,189 2,41 2,189 2,41 2,189 2,41 2,189 2,41 2,189 2,41 1,41 1,40 602 2,189 2,142 2,189 2,142 2,189 2,142 2,189 2,142 2,189 2,142 2,189 2,142 2,189 2,142 2,189 2,142 2,189 2,142 2,189 2,142 2,142 2,189 2,142 2,143 2,144	Naphtha-Type Jet Fuel Refinery Buk Terminal Pipeline Total	• • •	111	227 263 151 641		250	82 	192	790 730 143 1,663	326	⁶⁹	• • •	<u>6</u>	25	,		867 491 313 1,691	3,811 1,826 1,005 6,642
355 114 479 0 714 37 298 1,049 80 870 721 31 57 1,759 7 289 1,049 80 870 721 31 57 1,759 7 289 62 62 62 62 62 62 62 6	Kerosene-Type Jet Fuel Reiney Bulk Terminal Pipeline Total	1,284	111	1,284 5,871 3,814 10,969	8	1,438	8 	86 	1,697 4,383 2,142 8,222	1 1 225	3,262 - -		1	62	-		3,066 2,833 602 6,501	12,881 15,526 10,839 39,246
7,621 476 6,097 76 7,224 1,515 2,949 11,764 1,061 10,286 4,629 1,650 262 17,888 1,585 4,795 - - 54,838 - - - 10,127 - - - 7,520 690 5,341 - - 7,804 - - 10,127 - - - 7,520 690 5,341 - - - - - - - - - - 6,041 -	Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Total			479 3,613 445 0 4,537		47 1 0	£	88 1	1,049 993 155 0 2,197	8 	870 	721	۱۱۱	554	1,759 861 470 4 3,094		289 62 1 352	3,583 5,561 1,071 4
3,338 78 3,416 52 1,443 266 199 1,960 367 4,667 2,240 144 30 7,448 455 6,752 ************************************	illate Fuel Oils sinety		, , ,	8,097 54,938 7,804 0 70,839	92 1	7,224	1,515	2,949 1	11,764 20,833 10,127 0 42,724	1,061	10,286		1,650	262 - - -			4,795 5,341 1,041 0 0	44,129 89,322 27,887 1
	idual Fuel Oils finery		111	3,416 25,922 0 29,338	111	1,11	⁵ 1 1 1 299	₆ †	1,960 1,675 0 3,635	367	4,667	2,240	<u> </u>	8			6,752 1,822 8 8,582	20,031 34,422 9 54,462

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

	, P	PAD District I	_		PA	PAD District II	=				PAD District III	ict III			PAD	PAD	
Commodity	East Coast	Appa- lachi- an #1	Total	Appa- lachi- an #2	Ind., III., Ky.	Minn. Wisc., Daks.	Okla., Kans., Mo.	Total	Texas	Texas Gulf Coast	La. Gulf No. La., Coast Ark.		New Mexico	Total	Dist. IV	Dist. V West	United States
Naphtha < 400 Deg. Petro. Feedstock Refinery	06 06	00	88	00	162 162	00	48 48	210	58 %	797	368	88	00	1,336	0	Coast 161	1,797
Other Oils > 400 Deg. Petro. Feedstock Refinery	4 4	00	4 4	00	25 25	• • •	00	5 55 %	261	916	552 6	8 0	0 0 0	1,429	၁ ဖ	161 540	1,797
Special Naphthas Refinery Bulk Terminal Natural Gas Processing Plant Total	۱ ا	, l l	85 681 0 766	1 1	225		, 11	402 195 0 597	1 18	1,136	20 0	2 1 1	9 0 0	1,429 1,347 23 90	o =00=	208 37 37	2,004 2,053 936 90
Lubricants Refinery Bulk Terminal Total	1.142	8 9	2,100 1,239 3,339	11	671	0	. I 1	932 1,144 2,076	35	2,919	1,100	475	0 1	4,529 271 4,800	. 4 – 8 - 2	572 633 1205	8,197 3,288 11,485
Waxes Refinery	4	142	159 159	1	ا ئ	0	ا چ	37 35	1 50	247	t 1	85	0	503 503	3 00	<u> </u>	790
Petroleum Coke Refinery	1,162	00	1,162	00	472 472	59 59	95 95	626 626	₩	315 315	1,159	173 173	00	1,648 1,648	123	1,947	5,506 506 606 606
Asphalt and Road Oil Refinery Bulk Terminal	1,588	38	1,623 2,663 4,286	1 38	1,732	1,018	1 416	3,402 2,683 6,085	571	451	1,213	855 	147	3,004 337 3,341	504 23 527	1,382	9,915 5,843 15,758
Miscellaneous Products Refinery Bulk Terminal Pipeline Pipeline Natural Gas Processing Plant Total	, ss8 	8	292 126 13 0	- 101	2 2	١١١	6 I	79 25 119 225	8 8	551	278	19 1 2	0 0	924 37 195 89 1,245	900-7	119 90 0 0 209	1,420 278 327 92 92 2,117
Total Stocks, All Oils	ı	1 3	225,109	ı	1	I	1	271,391	1	l l	1	ı	1	811,644	29,651 172,478	172,478	1,510,273

1 Includes 33,879 thousand barrels of domestic crude oil.
Sources: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, November 1983 (Thousand Barrels)

X 57 000 000 000 000 000 000 000 000 000

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, November 1983 (Thousand Barrels)

Commodity	From I to	ō		From II to			From III to	≡ t			From IV to		From V to	l s
	=	=	-	=	2	-	=	2	>	=	Ħ	>	=	2
									1					
Natural Gasoline and Isopentane	0	o	0		c		700	c	c			•	•	
Dignt Conditionals	0	٥	0	200	0	0	100	0	0	- Ç	200	5 0	o c	0
Frame Collegiate	0	0	0		0			0	0			o c	o c	> c
Motor Gasoline Blonding Commenced	φ,	φ.	721		168		6,520	0	0			•	o c	0 0
Aviation Gasoline Blooding Commence	0 (ο .	0		0		1,251	0	0		0	· c	o c	0 0
Finished Motor Gasoline	5	0 1	0		0		٥	0	0			0	o C	o C
Finished Leaded Motor Gasoline	4,854 600 600 600	0 0	1,262		1.281		10,590	0	978			671	, C	0
Finished Unleaded Motor Gasotino	7,440	> 0	200		645		4,534	Φ	581			450	c	• =
Finished Aviation Gasoline	14.1	> (87,		836		6,056	٥	397			221	0	0
Naphtha-Type Jet Fuel	0 6	> (> 0		D ·		92	0	0			0	0	0
Kerosene-Type Jet Fuel	2	> c	⊃ ţ		o į		0	0	190			95	0	0
Kerosene	2 6	> 0	۰ ۵		468		1,794	0	133			33	0	0
Distillate Fuel Oil	200	> 0	>		Ď į		-	0	0			0	0	0
Residual Fuel Oil	900	> 0	410		174		4,694	o	376			120	0	0
Miscellaneous Products	o c	> c) (0 (0	0	0			0	0	0
Total	1	0	201		2		0	0	0			0	0	0
***************************************	DC / c	>	/20/2		2,091		26,627	0	1,677			918	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, November 1983 (Thousand Barrels)

;	"	From I to	******	_	From II to				From III to	≣ to			ŭ	From V to	
Continodity	=	=	>	_	=	>	_	New Eng	Atl Cent	Low	=	>	-	=	=
Crude Oil	0	0	0	0	0	0	413	•	413	•	1,970	0	2,192	•	18 764
Petroleum Products	2,486	279	0	451	148	211	22,704	1,205	4,621	16,878	2.401	22	c	c	ń
Hofficiated Oile	-	0 !	0	0	0	0	215	0	0	215	0	i c	· c	o c	} <
Motor Gasoline Blonding Composition	on o	152	0	0	0	0	8	0	N	0	0	0	¢	o c	o c
First described along Components	0 (0	0	0	0	0	108	0	0	108	0	· c	, c	o c	-
Finished Aviation Garoline	9,7	o (O 1	184	17	0	12,352	239	1,050	11,063	298	0	· c	· -	0
Nanhtha-Two let Enal	- (D (0	0	0	0	181	0	82	96	8	0	· c	· c	• •
Kernsene Tune det Eust	22 5	۰;	0	0	0	0	336	0	89	271	0	0	· c	o c	9 0
Kerosene	6 <u>7</u> '	25	0 (₽ '	0	0	2,655	119	906	1,630	178	0	0	0 0	
Distillate Fuel Oil	0 ;	-	0 1	0	0	0	76	0	32	4	10	0	0	· c	· c
Besidual Fuel Oil	42	0	۰ ۵	45	9	0	3,522	652	630	2,240	511	0	0	· c	-
Naphtha and Other Oile for Detro Eggal 120	⊃ 6	-	3 (8	6	21	1,803	75	1,031	618	0	0	0	0	· c
Special Naphthas	> (~ (Э,	0	0	0	ន	0	0	g	o	0	0	· c	• •
Lubricants	> 6	> (0	Φļ	0	0	327	32	158	137	197	72	0	0	•
Waxes	-	ර අ	.	37	2	Φ	751	0	561	190	340	o	0	c	· c
Asphalt and Road Oil	٥ د	> 0	•	0 ;	0	0	0	0	0	0	0	0	Φ	c	· c
Miscellaneous Products	-	<u>ې</u> د	O	ω 65	0	0	166	٥	0	166	371	0	c	· C	o c
	9	23	0	9	සි	0	184	თ	86	11	156	0	0	0	4.5
Total	2,486	279	0	451	148	211	23,117	1,205	5,034	16,878	4,371	22	2,192	0	18,809

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, November 1983 (Thousand Barrels)

	a	1 2 4													
		ואמוס סאי		ď	PAD District II	=	ď.	PAD District III	‡ ≡	PA	PAD District IV	≥	&	PAD District V	>
Согитодіку	Receipts into PADD I	Ship- ments from PADD 1	Net Receipt Receipts into PADD I PADD	Receipts into PADD II	Ship- ments from PADD II	Net Receipts PADD II	Receipts into PADD III	Ship- ments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Ship- ments from PADD	Net Receipts PADD	Receip into PADD	Ship- ments from	Net Receipts PADD V
Petroleum Products Natural Gasoline Unfractionated Stream Plant Condensate Liquefied Petroleum Gases Unfinished Oils Motor Gasoline Blending Components Aviation Gasoline Blending Components Finished Motor Gasoline Finished Leaded Motor Gasoline Finished Leaded Motor Gasoline Finished Luleaded Motor Gasoline Finished Aviation Gasoline Finished Aviation Gasoline Maphtha-Type Jef Fuel Kerosene-Tyme Jef Fuel	2,605 86,468 0 0 2,732 2,732 108 108 18,842 31,816 198	8,521 0 0 0 0 161 0 5,664 3,238 2,428 2,428	2,605 77,947 0 0 2,732 -159 108 0 44,994 115,604 29,390 678	1,970 38,936 410 1,701 6,792 9 1,251 0 0 17,272 8,372 8,372 8,372	10,765 500 3,243 0 4,595 2,237 2,358 59	1,970 28,171 408 1,201 3,549 9 1,251 6,135 6,135 6,542 1,151	85 8 - 2 3.1	8 500-0-0-	ሷ ቸ '' 'የላየ	2,091 0 0 0 0 1,281 645 636 0 0	3,283 3,283 10 1,300 0 272 272 0 0 0 0 1,091 739 352	0 -1,192 -100 -1,300 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.878 2.878 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20.956 45 00 00 00 00 00 00	2.833 2.833 0 0 0 0 0 0 0 0 0 1,649 1.031 618
Kerosene Jpc cer fruer Distillate Fuel Oil Residual Fuel Oil Naphtha and Other Oils for Petro. Feedstock Use Special Naphthas	9,562 658 18,178 1,863	330 35 2,048 0	9,232 623 16,130 1,863	2,255 46 7,732 0	593 0 1,123 332	1,662 46 6,609 -332	99 99 19 19 19	11,589 669 23,504 1,803	-931 -11,490 -669 -23,010 -1,742	0 468 174 0 0	174 37 0 399 0	-174 431 0 -225 0	285 165 0 496 211	00000	285 165 0 496 211
Lubricants Waxes Asphalt and Road Oil Miscellaneous Products	264 264 307	46 0 0 107	327 742 0 264 200	197 340 0 371 234	0 0 98 162	197 282 0 273 72	67 67 0 0 0 113	596 1,091 0 537 340	-596 -1,024 0 -537 -227	20000	00000	00000	02000	00000	0 2 0 0 0
Sources: See Explanatory Notes on Data Collection and Estimation.	89,073 on and Est		80,552	40,906	10,765	30,141	25,232 116,610 -91,378	16,610 -	91,378	2,091				45 -45 21,001 -18,123	8,123

Table 25. Production of Residual Fuel Oil By Sulfur Content, November 1983 (Thousand Barrels)

I I	East Coast Coast 2,725 551 1,973	PAD District Appalar Total 2,876 596 1,973	Appala- chian #2 98 98 0	III., Ky. 1,426 79	PAD District Minn., y. Wisc., y. Daks. 126 262 73 0 0	Okla., Mo. 309 96 96 96	2,095	Inland Inland 612 14	Gulf Gulf Coast 6,405	PAD Dis Gulf Coast 3,484 248	Ostrict III No. La., Nark. Nar	New Mexico 63	Total 10,820 661	PAD Dist. IV At. Mt. 338	PAD Dist. v West Coast Coast 8,325 880	United States States 25,454	
Source: See Explanatory Notes on Data Collection and Estimation.	201 tion and	106 d Estimat	307 ion.	115	963	ŀ	12.0	1,431	65	4,614	2,440	95 65	57	2.874	161	2,575 5,870	8,009

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, November 1983 (Thousand Barrels)

	PAD Dist. V United West States	244 1,597 24 6,931 268 8 5.98	7- 8	, 0
		142 142 2		
	Total R	452 54 506	2,422 2,800 5,222	4,574 2,149 6,723
	New Mexico	N 11	0	7 1 1
	No. La., Ark.	E 1	8	29
	La. No. L. Guif	<u>5</u> 1	896 J T	1,129
	Texas Gulf Coast	27.1	1,155	3,241
	Texas	8 1	235	6 11
	Total	230 67 297	491 649 1,140	1,239 959 2,198
=	Okla., Kans., Mo.	110	₈ 1 1	8
PAD District	Minn., Wisc., Daks.	11	11	7 - 266
ď	Ind., III., Ky.	1 1 28	4	875
	Appala- chian #2		0	
_ 5	Total	529 6,786 7,315	1,583 9,463 11,046	1,304 9,673 10,977
PAD District	East Appala- Coast chian	35	!	8 1 1
a	East	494	1,579	1,265
	Commodity	Residual Fuel Oil — 0.00 to 0.30% Suffur Refinery Bulk Terminal Total	Residual Fuel Oil — 0.31 to 1.00% Sulfur Refinery Bulk Terminal	Residual Fuel Oil – Greater than 1.00% Sulfur Refinery Bulk Terminal Total

Sources: See Explanatory Notes on Data Collection and Estimation.

— Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, November 1983 (Thousand Barrels)

			-			-										
	-	rom I to		L	From II to				From III to	≡			ļ 	From V to	£	l
Commodity	=	п	>		 -	>		New	£ 64	Low	=	>		=	=	1
Residual Fuel Oil 0.00 to 0.30% Sulfur 0.31 to 1.00% Sulfur Greater Than 1.00% Sulfur	0000	0000	0000	8008	6006	211	1,803 325 1,475	\$ 0 0 \$\frac{1}{2}	1,031 0 216 815	618 109 506	0000	0000		-	~ 0.500	9000

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, November 1983 (Thousand Barrels)

Country		Residu	al Fuel Oil	
Country	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
Arab OPEC				· · · · · · · · · · · · · · · · · · ·
Algeria	1,405	635	0	0.040
lraq	0	Ö		2,040
Kuwait	0	0	0	0
Libya	ŏ	-	513	513
Qatar	ő	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	-	0	0	0
Subtotal Arab OPEC	519	0	Ō	519
Subtotal Alab OFEC	1,923	635	513	
Out onne			010	3,072
Other OPEC				
Ecuador	0	0	100	
Gabon	ŏ		192	192
Indonesia	0	0	0	0
Iran	•	26	124	150
Nigeria	0	0	0	0
Nigeria	0	0	Õ	0
Venezuela	1,117	321	2,462	-
Subtotal Other OPEC	1,117	347		3,900
Other	-	071	2,778	4,242
Angola	0	0	0	^
Australia	0	Ö	0	0
Bahamas	1.306	188	_	0
Bolivia	.,0		0	1,494
Brazil	334	0	0	0
Brunei		0	0	334
Canada	0	0	0	0
Conco	160	257	255	672
Congo	0	0	0	0
Egypt	0	0	ŏ	-
France	0	õ	Ö	0
Ghana	Ō	ő	-	0
Liberia	Ŏ	_	0	0
Malaysia	0	0	0	0
Mexico		0	0	0
Netherlands	0	0	473	473
Natharlanda Antillas	(s)	361	0	361
Netherlands Antilles	0	233	1.926	
Norway	0	0	1,520	2,158
Oman ,	ō	0	•	0
People's Republic of China	ŏ	-	0	0
Peru	796	0	0	0
Puerto Rico		523	473	1,792
Aomania	0	0	0	1,1.2.
Homania	0	0	ŏ	. 0
Spain	0	178	0	
Syria	0	,,0	0	178
Trinidad	ŏ	0	-	0
Tunisia	ů	*	320	320
United Kingdom	-	0	. 0	0
Virgin Islands	0	0	0	0
Visionalouio	1,668	3,650	1,686	7,005
Yugoslavia	0	0	0	7,003 N
Zaire	0	ō	ň	¥
Other Western Hemisphere	0	43	636	0
Other Eastern Hemisphere	384	80		679
Subtotal Other	4,648	5,514	73 5 0 4 1	537
otal Imports	44.4	J U 4	5,841	16,003

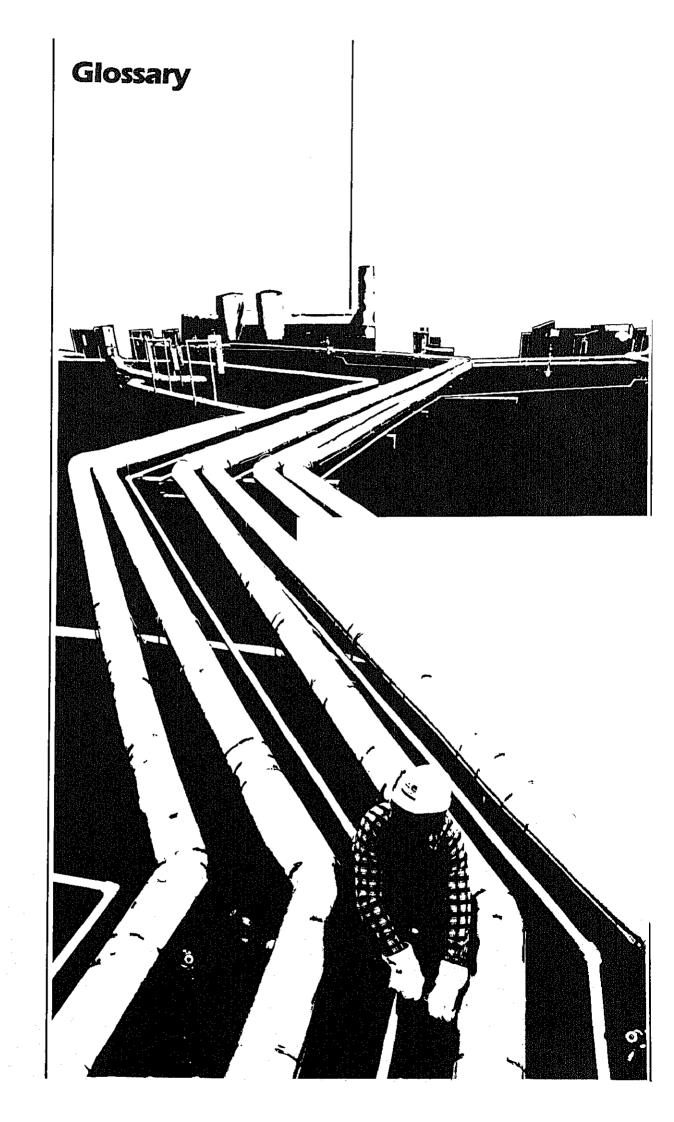
(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, November 1983 (Thousand Barrels)

		Residua	Residual Fuel Oil	
State	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
PAD District I	000			
***************************************	026,6	5,917	8,109	20,946
Delaware	> (390	0	068
Florida	o (0	187	187
Georgia	0 (763	233	266
Maine	0	0	49	49
Maryland	0	188	292	955
Massachucotts	0	105	162	282
New Hampshire	191	361	1,251	1.803
Now locou	0	0	219	210
New York	761	774	280	2113
	5,639	2,217	3 635	11 401
Dhodo loted	320	1,119	263	1001
nitode Island	0		34	20.
South Carolina	0	. c	3	20
Vermont	· a	0 0	124	124
Virginia	• c	> (ɔ	o
	>	0	590	590
PAD District II	Ţ			
	13.	118	86	346
Michigan	ɔ ;	118	0	178
Microsoph	62	0	57	
Will in the Docks	15	0	7	200
NOTICE CAROLA	m	0	: «	0 0
WISCORSIN	35	0	3 C	/7
)	c o
rad district III	620	355	4,12	7
Coulsiana	205	34	; c	104.
exas	415	321	513	230
PAD District IV				2
Montana	= :	0	17	%
	=	0	17	2 %
PAD District V	•			}
California	•	106	397	509
Taxaii	(0	200	500
Machinaton	0	106	197	303
	မှ	0	o	9
All PAD Districts	7.689	307 3	4	
)	0.000	9,132	23,317

Note: Total may not equal sum of components due to independent rounding. Sources: See Explanatory Notes on Data Collection and Estmation.



:			
: :			

Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-OH. Alcohol includes methanol and ethanol

Alkylation. A refinery process for chemically combining Isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

Deg API =
$$\frac{141.5}{\text{sp gr 60F/60F}}$$
 - 131.5

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Milltary Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of Input that can be processed in a twenty-four hour period after making allowances for the following IlmItations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhenium).

Butane. A normally gaseous paraffinic hydrocarbon, C4H10. It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

Isobutane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

Normal Butane. A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

Other Butanes. All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C4H8, recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle bolling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solld or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

Domestic. Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

Foreign. Crude oil produced outside the United States.

Delayed Coking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizingtype burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

No. 1-D. A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

No. 2-D. A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F, for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner Installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawalian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C2H6) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C2H4) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidizedsolids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turboprop alreraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefled refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Lubricants includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

Bright Stock. A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

Neutral. A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

Other. A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. Motor gasoline includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha bolling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, tinished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C5H12, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are Naphtha-less than 400 degrees F. end-point and Other oils-over 400 degrees F, end-point.

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feed-stock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This green coke may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C3H8, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C3H6, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust pallative and surface treatment on roads and highways. It is generally produced in

six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. Special naphthas includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary

distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is lightcolored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Sec-

onds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffln wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that Includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following countles of the State of Ohlo: Erle, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all countles east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not Included in the Appalachian District

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Guit Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

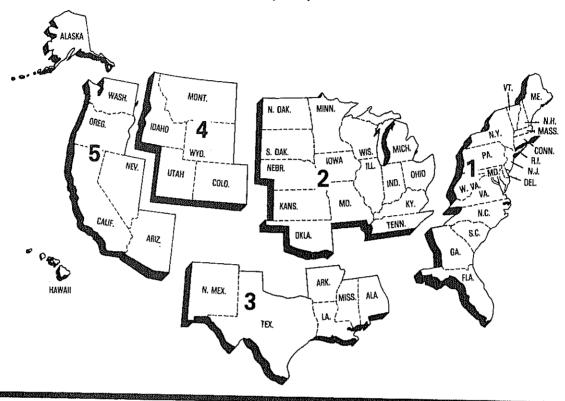
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

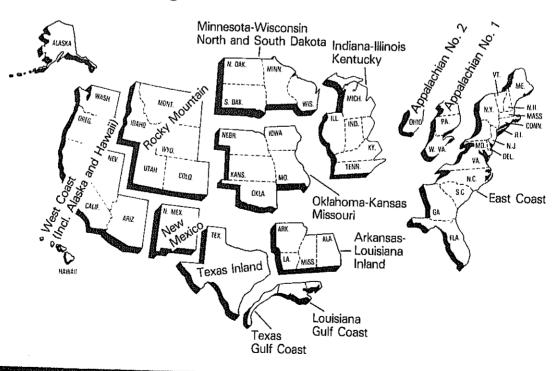
PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawali.

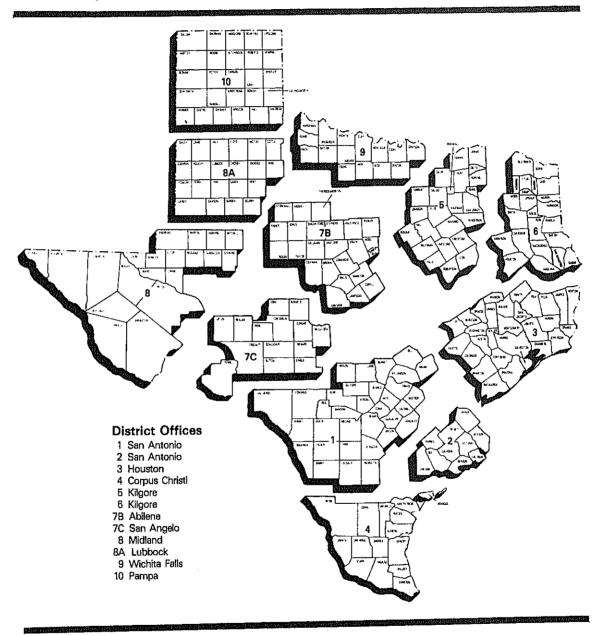
Petroleum Administration for Defense (PAD) Districts



Bureau of Mines Refining Districts



District Map Oil and Gas Division Railroad Commission of Texas





Explanatory Notes



te 1: Data Collection Methodology

Background

Inning In January 1983, the Energy Information Adjustration (EIA) unified its petroleum supply data colon activities into the Petroleum Supply Reporting em (PSRS). The PSRS represents a family of data action survey forms, data processing systems and iteation systems that have been consolidated to eve comparability and consistency throughout primary focus of the consolidation has been to rethe weekly and monthly survey reporting forms to the consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey were implemented in January 1983. The followare the new form numbers and their corresponding lacessor forms:

ew Form	Name	Old Form Number
A-800	Weekly Refinery Re-	EIA-161
<i>y</i> . 000	port	
A-801	Weekly Bulk Termi- nal Report	EIA-162
A-802	Weekly Product Pipe- line Report	EIA-163
A-803	Weekly Crude Oil Stocks Report	EIA-164
A-804	Weekly Imports Re-	EIA-165
A-805	Weekly Shipments- from Puerto Rico to the United States Report	
A-810	Monthly Refinery Report	EIA-87
A-811	Monthly Bulk Termi- nal Report	EIA-88
A-812	Monthly Product Pipeline Report	EIA-89
A-813	Monthly Crude Oil Report	EIA-90
₹A-60	Monthly Imports Report	ERA-60
A-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133- M-0
A-816	Monthly Natural Gas Liquids Report	EIA-64
△ -817	Monthly Tanker and Barge Movement Report	EIA-170

Ins EIA-800 through 805 comprise the Weekly Petron Supply Reporting System (WPSRS). This system esigned to collect basic refinery operations and duct stock data for major products on a weekly babata from the WPSRS are published in the Weekly foleum Status Report (WPSR) and are also used to fulate the preliminary statistics in the "Summary statics" section of the Petroleum Supply Monthly

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the *PSM*. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the *PSM*. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) Weekly Statistical Bulletin. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the Weekly Petroleum Status Report.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EiA-803: Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the Weekly Petroleum Status Report.

Collection Methods

Data are collected by mail, mallgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s) . The result is multiplied by the amount reported by the sample of companies for the current week (W_s) . The answer, W_t , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a companyby-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the *PSM*.

EiA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oll imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the Oil and Gas Journal and LP Gas Almanac for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to non-respondents prior to the publication deadline, for their data. An automated malling list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filling deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the *PSM*.

Import Statistics (IM-145)

Coverage

The Import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

- Merchandise In-transit through the United States, when documented with Customs as an in-transit movement.
- 2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgln Islands, Guam, and American Samoa.)
- 3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. Import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

- 1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
- 2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Custom's officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, Refinery Report.

Refinery Inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EiA-810, Monthly Refinery Report. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, Monthly Refinery Report, and on Form EIA-813, Monthly Crude Oil Report. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, Weekly Refinery Report, and on Form EIA-803, Weekly Crude Oil Stocks Report. Primary stocks of petroleum products are summed from data reported on Form EIA-816, Monthly Natural Gas Liquids Report, Form EIA-811, Monthly Bulk Terminal Report, and on Form EIA-812, Monthly Product Pipeline Report. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, Weekly Refinery Report, Form EIA-801, Weekly Bulk Terminal Report, and Form EIA-802, Weekly Crude Oll Stocks Report. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3,

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefled petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an average range that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; It is not a forecast.

These curves are updated semiannually (on Arpll 1 and October 1), by basing the average ranges on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the average range is twice this standard error.

The upper curve of the average range is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, Monthly Tanker and Barge Movement Report, and on Form EIA-813, Monthly Crude Oil Report. Petroleum product movements are reported on Forms EIA-817 and EIA-812, Monthly Product Pipeline Report. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the Summary Statistics section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

• Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.
- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.
- Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oll, Refinery Inputs, and Exports appear as labeled in Table 1.
- Crude losses and Product Supplied appear as labeled in Table 4.
- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.
- Total Crude oil Ending Stocks appear in thousand barrels in Table 2.
- Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.
- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.
- Ending Stocks appear in thousand barrels in Table

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

Ending Stocks appear in thousand barrels in Table
 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.
- Ending stocks appear in thousand barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.
- Ending stocks are aggregated from ending stocks in thousand barrels.

Note 9.7 Table 1. U.S. Petroleum Balance

- Lines (1) through (3): Crude oil (including lease condensate) production for Alaska, Lower 48 States, and Total U.S. are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.
- Line (5): SPR Imports are reported on Survey Form ERA-60.
- Line (12): Total Other Sources equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.
- Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.
- Line (15): NGPL Imports equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): NGPL Stock Withdrawal (+) or Addition (-) is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.
- Line (17) equals the sum of lines (14), (15), and (16).
- Line (18): Unfinished oils and gasoline blending components Stock Withdrawal (+) or Addition (-) equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.
- Line (20): Other Hydrocarbons and Alcohol New Supply equals the field production of same in Table 2.
- Line (21): Refinery Processing Gain is a balancing item equal to total refinery production minus total refinery input in Table 2.
- Line (23): Total Other Liquids equals the sum of lines (18) through (22).
- Line (24): Total Production of Products equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.
- Line (25): Gross Imports of Refined Products equals imports of LPG plus imports of finished petroleum products In Table 2.
- Line (26): Exports of Refined Products equals exports of LPG plus exports of finished petroleum products in Table 2.
- Line (27): Net Imports of Refined Products equals the difference between lines (25) and (26).
- Line (28): Total New Supply of Products equals crude oil input to refinerles plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation

gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): Refined Products Stocks Withdrawal (+) or Addition (-) equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.
- Line (30): Total Petroleum Products Supplied for Domestic Use equals total products supplied in Table 2.
- Lines (31) through (35) equal the respective products supplied in Table 2.
- Line (36): Other Products Supplied equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.
- Line (37): Total Product Supplied is equal to total products supplied in Table 2.
- The sum of lines (38) and (39), stocks of Crude Oll and Lease Condensate (Excluding SPR) and stocks held by the Strategic Petroleum Reserve, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.
- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

- Crude Oil and Petroleum Products: 1974—1,121;
 1980—1,420; and 1982—1,462.
- Motor Gasoline: 1974—225; 1980—263; 1982—244 (Total) and 203 (Finished).
- Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186,

- Residual Fuel Oil: 1974—75; 1980—91; and 1982—68.
- Liquefied Petroleum Gases: 1974—113; 1980—128; and 1982—103.
- Other Petroleum Products: 1974—220; 1980—249; and 1982—259.
- Stock withdrawal calculations beginning in 1975, 1981, 1983 were made using new basis stock levels.

Note 11:

Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

Note 12: Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting systems.

ElA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings throughout 1980. However, estimates of the magnitudes of differences in the major

data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasolinesales data series, which is derived from State tax receipts. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference—in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the Petroleum Statement Annual, as well as EIA and API estimates of "recast" motor gasoline product supplied. EIA recast estimates were based upon preliminary monthly information in the Monthly Petroleum Statement. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years. EIA has recently published a study of the quality of these FHWA data.

Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets (Washington, D.C: December, 1981).

Finished Motor Gasoline Product Supplied on Old and New Basis (Thousand Barrels per Day)

		19	979			19	80	
	EIA Reported	API Recast	EIA Recast	FHWA'	EIA Reported	API Recast	EIA Recast	FHWA'
Jan	6,830	7,230	7,084- 7,246	6,984	6,323	6,789	6,630- 6,791	6, 6 72
Feb	7,254	7,496	7,389- 7,568	7,538	6,596	6,983	6,831- 7,003	6,830
Mar	7,229	7,414	7,301- 7,463	7,316	6,406	6,753	6,607 6,768	6,713
Apr	7,055	7,300	7,187- 7,353	7,375	6,800	7,014	6,886- 7,052	6,981
May	7,213	7,429	7,313- 7,475	7,428	6,729	6,954	6,823- 6,984	7,044
Jun	7,191	7,483	7,350- 7,516	7,441	6,657	6,966	6,824- 6,991	7,049
Jul	6,902	7,241	7,105- 7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,546	7,426- 7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,881	7,122	7,016- 7,262	7,232	6,510	6,692	6,962	6 ,6 85
Nov	6,791	7,068	6,956- 7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966- 7,127	7,064	6,632	6,948	6,936	6,993
Average	7,034	7,302	7,183- 7,347	7,309	6,579	6,882	6,806- 6,889	6,925

¹FHWA gasoline statistics published in their 1979 Table MF-33G, 08-06-80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment.

Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oil produced by a refinery is shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was sub-

tracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981 this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)

		Distillate	Fuel Oil			Residua	al Fuel Oil	
Month	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,646	1,912	1,946	34	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	30	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	4	3,243
Apr.	2,945	2,978	32	3,048	1,639	1,656	17	2,524
May	3,066	3,093	27	3,025	1,586	1,600	14	2,524
Jun.	3,153	3,187	35	2,743	1,548	1,566	18	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	20	
Aug.	3,321	3,359	38	2,799	1,584	1,603	20	2,471
Sep.	3,354	3,306	- 48	2,599	1,627	1,602	- 25	2,570
Oct.	3,251	3,217	- 34	3,085	1,629	1,612	- 17	2,584
Nov.	3,239	3,200	- 39	3,208	1,736	1,716		2,523
Dec.	3,221	3,238	17	3,725	1,894	1,710	– 20 9	2,795 3,022
Average	3,152	3,169	16	3,327	1,687	1,695	8	2,834

1980

		Distillate	Fuel Oil		N	Residual	l Fuel Oil	
Month	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.	3,013 2,766 2,557 2,460 2,474 2,646 2,689 2,461 2,686 2,589 2,703 2,891	3,093 2,888 2,690 2,554 2,610 2,721 2,783 2,582 2,726 2,650 2,823 3,052	80 122 133 94 136 75 94 121 40 61 120	3,794 3,834 3,312 2,729 2,538 2,392 2,343 2,258 2,627 2,981 3,069 3,776	1,771 1,773 1,584 1,595 1,509 1,575 1,480 1,444 1,495 1,512 1,579 1,660	1,812 1,836 1,652 1,643 1,579 1,613 1,528 1,506 1,516 1,543	41 63 68 48 70 38 48 62 21 31 62	3,108 3,168 2,726 2,492 2,305 2,359 2,339 2,348 2,380 2,258 2,513
Average	2,661	2,764	103	2,969	1,580	1,743 1,634	83 54	2,762 2,562

DOE F 1340.1

Energy Information Administration



(2-80)		
	GPO SUBSCRIPTION ORDER FORM	
(For use in ordering EIA Publications only -	(For use in ordering EIA Publications only $-$ Read Ordering Information Section before completing form.)	n.)
SEND ORDER FORM TO: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402	ments, U.S. Government Printing Office, Wa	shington, D.C., 20402
Enclosed is \$ □ Check	Credit Card Orders Only	
☐ Money order, or charge to my	Total charges \$ Fill in th	Fill in the boxes below
	Card No.	
Order No.	Expiration Date Month/Year	VISA Master Card
PLEASE PRINT OR TYPE NAI	NAME AND ADDRESS FOR OFFICE USE ONLY	ONLY
NAME - FIRST, LAST	QUANTITY	1TY CHARGES
COMPANY NAME OR ADDITIONAL ADDRESS LINE	TO BE MAILED	ED
	POSTAGE	IPTIONS
STATES ADDRESS	FOREIGN HANDLING	ING
CITY	STATE ZIP CODE OPNR	
(OR COUNTRY)	Non	
	DISCOUNT	±N.
PRINT OR TYPE TITLES OF ITEMS YOU WISH TO RECEIVE ON A	O RECEIVE ON A SUBSCRIPTION BASIS:	